

VIDE-V24475

# Service Manual

**ViewSonic E790/E790B**

**Model No. VCDTS21466-1**  
**VCDTS21466-2**

***19" Digital Controlled Color Monitor***



( March 1999)

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## Revision History

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## **WARNING**

This service information designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians.

Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# SAFETY PRECAUTIONS

## 1 CAUTION

No modification of any circuit should be attempted. Service work should only be performed after you are thoroughly familiar with all of the following safety checks and servicing guide lines.

## 2 SAFETY CHECK

Care should be taken while servicing this CRT display because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

## 3 FIRE & SHOCK HAZARD

- 3-1 Insert an isolation transformer between the CRT display and AC power line before servicing the chassis.
- 3-2 In servicing pay attention to original lead dress especially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.
- 3-3 All the protective devices must be reinstalled per original design.
- 3-4 Soldering must be inspected for possible cold solder joints, frayed leads, damaged insulation, solder splashes or sharp solder points. Be certain to remove all foreign material.

## 4 LEAKAGE CURRENT COLD CHECK

- 4-1 Unplug the AC cord and connect a jumper between the two prongs on the plug.
- 4-2 Turn the CRT display power switch "on".
- 4-3 Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metallic part on the CRT display such as the metal frame, screwheads, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be 1.8 megohm minimum.

## 5 LEAKAGE CURRENT HOT CHECK

- 5-1 Plug the AC cord directly into the AC outlet. Do not use an isolation transformer during this check.
- 5-2 Connect a 1500 ohm, 10 watt resistor, paralleled by a 0.15uF capacitor between each exposed metallic part and a good earth ground(as shown in Fig.1).
- 5-3 Use an AC voltmeter with 1000 ohm/volt or more sensitivity and measure the AC voltage across the combination 1500 ohm resistor and 0.15uF capacitor.
- 5-4 Move the resistor connection to each exposed metallic part and measure the voltage.
- 5-5 Reverse the polarity of the AC plug in the AC outlet and repeat the above measurement.
- 5-6 Voltage measured must not exceed 7.5 volt RMS, from any exposed metallic part to ground. A leakage current tester may be used in the above hot check, in which case any current measured must not exceed 5.0 milliamp. In the case of a measurement exceeding the 5.0 milliamp value, a rework is required to eliminate the chance of shock hazard.

*Note: High voltage is present when this CRT display is operating. Always discharge the anode of the picture tube to the display chassis to prevent shock hazard.*

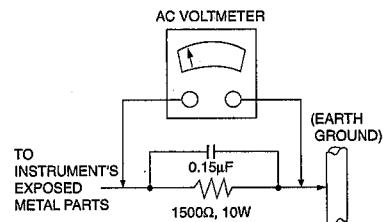


Fig. 1

## 6 IMPLOSION PROTECTION

Picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation.

## 7 X-RADIATION

**WARNING :** The only potential source of X-Radiation is the picture tube. However when the high voltage circuit is operating properly there is no possibility of X-Radiation problem. The basic precaution which must be exercised is to keep the high voltage at the following factory- recommended level.

**Note:** *It is important to use an accurate periodically calibrated high voltage meter.*

- 7-1 The procedure for adjusting high voltage is shown on page 20.
- 7-2 If high voltage cannot be set to 26kV, immediate service is required to prevent the possibility of premature component failure.
- 7-3 To prevent X-Radiation possibility it is essential to use the specified picture tube.

## IMPORTANT SAFETY NOTICE

There are special components used in this CRT displays which are important for safety. These parts are identified by the international symbol  on the schematic diagram and on the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design or this will void the original parts and labor guarantee.

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## GENERAL INFORMATION

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### 1. OUTLINE

This monitor is 19 inch (18" viewable) multi-scan color CRT display with the following features.  
IIC Bus Micro processor & Enhanced OSD are newly introduced, which optimize the function.

### 2. FEATURES

#### 2-1 SSP-Lite LSI (Advanced Super Signal Processor) mounted

Precise wave forms are generated for the correction of each geometric distortion.

#### 2-2 Power Saving

Built-in power Saving function based on VESA-DPMS and Energy 2000 standard.

Power energy shall be saved by controlling the circuit in accordance with power saving signal from computer.

#### 2-3 OSD (on screen display) function

OSD (5 languages & multi location) is new and excellent man-machine interface.

Anyone is able to set up the picture as he likes through icon & four keys in front bezel.

#### 2-4 Self Diagnosis

This monitor has a Self Diagnosis OSD feature that is pops up when the signal cable is not connection between a PC and a monitor.

#### 2-5 Ergonomic design

- Low emission design to meet MPR-II & TCO'95

- ESF (Electro static field) free coating on CRT

- Tilt &Swivel stand is mounted

#### 2-6 Multi scan with digital technology

8 bit micro computer controls the circuit operation to meet with wide range signal of fH=30~95 kHz and fV=50~200 Hz.

So VGA, SVGA, XGA(1024x768), SXGA(1280x1024) (1600x1200) are applicable.

#### 2-7 11 Factory presets, 25 User memories.

- 11 mode is preset at the factory.
- 25 user memories are available to set the user's own timing and display information.

#### 2-8 Flat Face and fine dot pitch

Flat face CRT with fine dot pitch of 0.26 mm (Horizontal:0.231mm / Vertical:0.129mm) gives a crispy and comfortable sight of the screen.

#### 2-9 Superior display performance

- Good focus by sophisticated gun and dynamic focus circuit.
- High contrast
- Minimized distortion by digital correction circuit
- Good convergence
- Users enjoy full scan image for graphics

#### 2-10 Special function

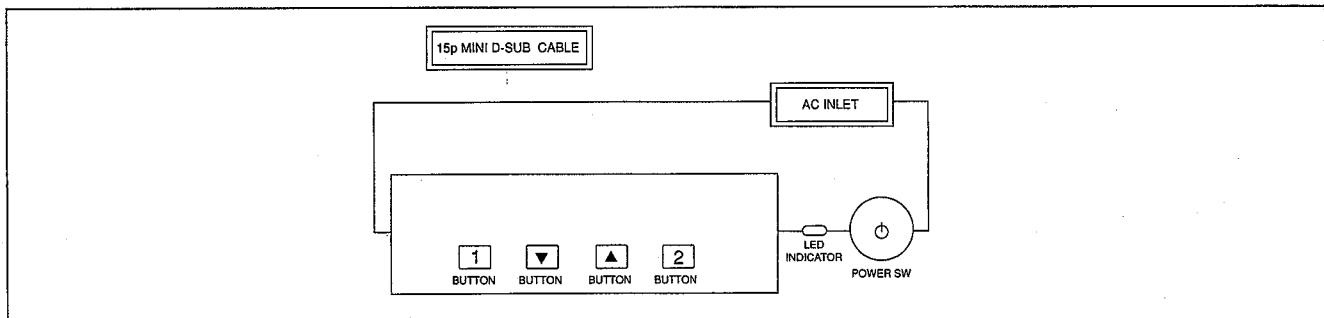
- VESA DDC2B (Display Data Channel) compatible
- Rotation control circuit
- Multi color : 9300K & 6500K & 5000K are preset at the factory
- Moire Reduction circuit
- Convergence Reduction circuit

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## SPECIFICATION

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### 1. DIAGRAM



1.1 POWER SW, LED, ▼ Key (DOWN), ▲ Key (UP), ENTER Key, EXIT Key are located on the front panel.

1.2 Signal cable and AC inlet are located on the back side of the cabinet.

#### 1.3 OSD menu includes the following function.

Contrast	Brightness	H/V Size
Tilt	H-Pincushion	H-Trapezoid
Pin-W	H-Pinbalance	H-Parallelogram
Pin-S	H/V Position	H/V Convergence
Zoom	Video Level	H/V-Moire Reduction
Viewmeter	OSD Position	Viewmatch Color
Degauss	Memory-Recall	Language
Select	Exit	

— With sync signal, OSD menu appears by pushing ENTER Key or Exit Key

## 2. MECHANICAL SPECIFICATIONS

.....refer to the attached drawing

2.1 Dimension Height : 465 mm (18.3") (typ.)

Width : 452 mm (17.8") (typ.)

Depth : 468 mm (18.4") (typ.)

2.2 Net weight

: 24.0Kg (52.9 lbs) (typ.)

2.3 Maximum Viewable Phosphor Display Area:

: 457.2 mm (18") (typ.)

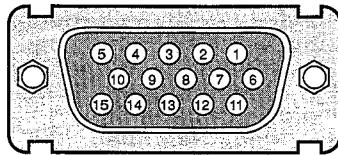
## 3. CONNECTORS

3.1 Signal connector:

15P Mini D-Sub

3.2 AC inlet: CEE 22 typed connector

### <15P Mini D-Sub 15P PIN assignment>



1...RED	6...GROUND	11...GROUND
2...GREEN	7...GROUND	12...SDA(DDC)
3...BLUE	8...GROUND	13...H.SYNC
4...GROUND	9... - (OPEN)	14...V.SYNC
5...GROUND(S.T)	10...GROUND	15...SCL(DDC)

## 4. CRT SPECIFICATIONS

Part No	2423GG2B91D
Type	19", 90°, 29.1mm. (Viewable 18.0")
Dot pitch	0.26mm
Phosphor	P22 Cd-free phosphors
	Red x = 0.642 typ, y = 0.330 typ Green x = 0.273 typ, y = 0.605 typ Blue x = 0.142 typ, y = 0.063 typ
Bulb	TINT
Face coating	Anti-Glare, Anti-Static & Anti-Reflecton
Total Transmission	46%

## 5. ELECTRICAL SPECIFICATIONS

5.1 Standard conditions ... Except special items

Display image	Green, full "H" characters with a border line. (11 x 6 dots) Video signal : 100% duty Display area : 365.8 mm x 274.3 mm
Video signal level	0.7V pp
Contrast, Brightness	Contrast : Max., Brightness : Cut-off
Ambient Temperature	20±5°C (68±9°F)
Input Voltage	AC 90~240V, 50/60Hz
Terrestrial magnetism	Vertical field : northern hemisphere field 40µT Horizontal field : no field
Viewing direction	Parallel to the CRT axis
Measurements	After an initial warming up time of more than 30 minutes.
Ambient light	200±50 Ix
Display mode	1280 x 1024 (79.98 kHz, 75 Hz)

## 5.2 POWER

5.2.1 Power supply ... Commercial power source

Input	AC100 - 240V
Power frequency	50Hz±3Hz, 60Hz±3Hz
Input current	2.7 Max. (100V)
Inrush current (at 20°C)	Cold start : 50A, Hot : 80A
Power consumption	140W Typ. 150W Max

### 5.2.2 Power Management for power Saving ...

Power saving system is designed based upon VESA DPMS and Energy 2000 Standard.

#### 1) Power consumption and recovery time

*1 APM State	SIGNALS			MONITOR POWER CONSUMP- TION	RECOVERY POWER TO ON STATE	INDICATOR
	H. Sync	V. Sync	VIDEO			
ON	*3 NOR- MAL	*3 NOR- MAL	*2 ACTIVE	*4 100%	—	Green
STAND- BY	No Sync or *5 < 10 Hz	> 40 Hz	BLANK	< 15 W	< 3 sec.	Orange
SUS- PEND	> 10kHz	No Sync or *5 < 10 Hz	BLANK	< 15 W	< 3 sec.	Orange
OFF	No Sync or *5 < 10 Hz	No Sync or *5 < 10 Hz	BLANK	< 3 W	< 10 sec.	Orange

\*\* The transition time from ON state to each APM states is 5 seconds minimum.

\*1 : APM : Advanced power Management.

\*2 : Measurement Condition of power consumption for ON state : DISPLAY IMAGE : WHITE full "H" characters(11 x 6 dots).

\*3 : NORMAL : See "5.4 ACCEPTABLE TIMING"

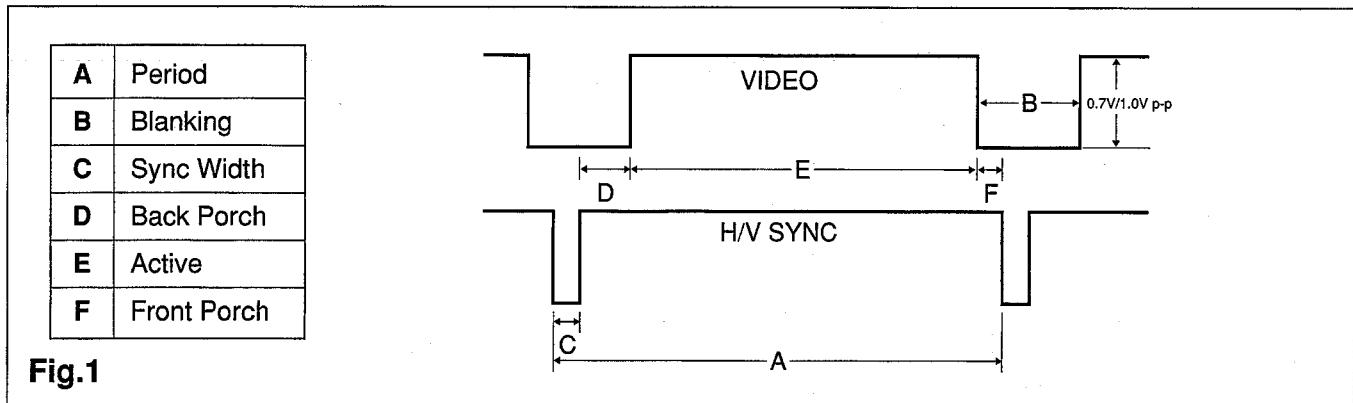
\*4 : Power Consumption is measured at AC 100 - 240V. (Note:140W Typ. at AC 230V/50Hz)

\*5 : Power saving operation is done at least less than specified value in the list.

## 5.3 Standard timing (Standard mode)

- Following 11 modes are preset in the memory as standard timing at the factory.
- Fig-1 shows a definition of timing and signal level.
- Electrical performance is specified in this SPECIFICATION at STD (1280x1024) mode unless otherwise mentioned.

## TIMING CHART



	MODE - 1	MODE - 2	MODE - 3	MODE - 4	MODE - 5
	640 x 400 (70)	640 x 480 (85)	800 x 600 (85)	1024 x 768 (75)	1024 x 768 (85)
<b>H</b>	fH	31.470 kHz	43.270 kHz	53.670 kHz	60.020 kHz
	A- PERIOD	31.788 µs	23.111 µs	18.631 µs	16.660 µs
	B- BLANKING TIME	6.360 µs	5.334 µs	4.409 µs	3.657 µs
	C-SYNC WIDTH	3.813 µs	1.556 µs	1.138 µs	1.219 µs
	D-BACK PORCH	1.9090 µs	2.222 µs	2.702 µs	2.235 µs
	E-ACTIVE TIME	25.418 µs	17.778 µs	14.222 µs	13.003 µs
<b>V</b>	F-FRONT PORCH	0.638 µs	1.556 µs	0.569 µs	0.203 µs
	fV	70.090 Hz	85.008 Hz	85.061 Hz	75.029 Hz
	A- PERIOD	14.268 ms	11.764 ms	11.756 ms	13.328 ms
	B- BLANKING TIME	1.556 ms	0.670 ms	0.578 ms	0.533 ms
	C-SYNC WIDTH	0.064 ms	0.069 ms	0.056 ms	0.050 ms
	D-BACK PORCH	1.111 ms	0.578 ms	0.503 ms	0.466 ms
	E-ACTIVE TIME	12.712 ms	11.093 ms	11.179 ms	12.795 ms
	F-FRONT PORCH	0.381 ms	0.023 ms	0.019 ms	0.017 ms
	SYNC POLARITY(H/V)	Negative/Positive	Negative/Negative	Positive/Positive	Positive/Positive
					Positive/Positive

### PRIMARY MODE

	MODE - 6	MODE - 7	MODE - 8	MODE - 9	MODE - 10	MODE - 11
	1280x1024 (75)	1280 x 1024 (85)	1600 x 1200 (75)	832 x 624 (75)	1024x 768 (75)	1152 x 870 (75)
<b>H</b>	fH	79.980 kHz	91.150 kHz	93.750 kHz	49.730 kHz	60.240 kHz
	A- PERIOD	12.504 µs	10.971 µs	10.667 µs	20.111 µs	16.600 µs
	B- BLANKING TIME	3.023 µs	2.844 µs	2.765 µs	5.586 µs	3.800 µs
	C-SYNC WIDTH	0.067 µs	1.016 µs	0.948 µs	1.117 µs	1.200 µs
	D-BACK PORCH	1.837 µs	1.422 µs	1.501 µs	3.910 µs	2.200 µs
	E-ACTIVE TIME	9.481 µs	8.127 µs	7.901 µs	14.524 µs	12.800 µs
<b>V</b>	F-FRONT PORCH	0.119 µs	0.406 µs	0.316 µs	0.559 µs	0.400 µs
	fV	75.029 Hz	85.024 Hz	75.000 Hz	74.550 Hz	74.927 Hz
	A- PERIOD	13.329 ms	11.761 ms	13.333 ms	13.414 ms	13.346 ms
	B- BLANKING TIME	0.526 ms	0.527 ms	0.534 ms	0.864 ms	0.598 ms
	C-SYNC WIDTH	0.038 ms	0.033 ms	0.032 ms	0.060 ms	0.050 ms
	D-BACK PORCH	0.475 ms	0.483 ms	0.491 ms	0.784 ms	0.498 ms
	E-ACTIVE TIME	12.804 ms	11.235 ms	12.800 ms	12.549 ms	12.749 ms
	F-FRONT PORCH	0.013 ms	0.011 ms	0.011 ms	0.020 ms	0.050 ms
	SYNC POLARITY(H/V)	Positive/Positive	Positive/Positive	Positive/Positive	Negative/Negative	Negative/Negative
					Negative/Negative	Negative/Negative

#### 5.4 Acceptable timing

- If your timing is within the following specification, this CRT display can automatically function with a certain size and position.

Horizontal : Sync frequency : 30 ~ 95 kHz

Blanking Time :  $\geq 2.765 \mu s$

Back Porch :  $\geq 1.440 \mu s$

Front Porch :  $\leq$  Back Porch

Sync Width :  $1.117\sim 3.813 \mu s (f_H < 50kHz)$   
 $0.016\sim 1.219 \mu s (f_H > 50kHz)$

Vertical : Sync frequency : 50~200 Hz

Blanking Time :  $\geq 0.526 ms$

Back Porch :  $\geq 0.466 ms$

Sync Width :  $\geq 0.032 ms$

Please note, however, that there is the case you can not get the size and/or position you want, (for example, in case Display video Time is too short, you can't get bigger size of the image.)

- The CRT adopted in this CRT display is designed to minimize the moire phenomenon at suitable size for typical display modes. However, there might be a display format among many formats, in which the moire phenomenon appears on this display.

#### 5.5 Signal level and input impedance

##### 5.5.1 Video Signal level

- This CRT display is adjusted at the factory using 0.7Vpp Video Signal. Black level is 0V.
- This CRT display is compatible with 1.0Vpp Video signal by using Video input level selection.

##### 5.5.2 Sync Signal level

- H/V Separate, TTL level

##### 5.5.3 Input impedance

- Video input :  $75\Omega$
- Sync input :  $\geq 1k\Omega$

#### 5.6 Display performance

##### 5.6.1 Display area

MODE 1 (640 x 400 @ 70Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 2 (640 x 400 @ 85Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 3 (800 X 600 @ 85Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 4 (1024 X 768 @ 75Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 5 (1024 X 768 @ 85Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 6 (1280 X 1024 @ 75Hz)

WIDTH : 350 mm  $\pm 3$  mm

HEIGHT : 262 mm  $\pm 3$  mm

MODE 7 (1280X 1024 @ 85Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 8 (1600 X 1200 @ 75Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 9 (832 X 624 @ 75Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 10 (1024 X 768 @ 75Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

MODE 11 (1152 X 870 @ 75Hz)

WIDTH : 350 mm  $\pm 4$  mm

HEIGHT : 262 mm  $\pm 4$  mm

##### • FULL SCAN

WIDTH : 365.8 mm

HEIGHT : 274.3 mm

#### 5.6.2 Centering

##### 1) PRIMARY TIMING (MODE 6)

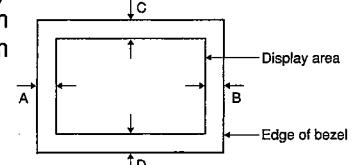
H:  $|L-R| \leq 2 mm$

V:  $|L-R| \leq 2 mm$

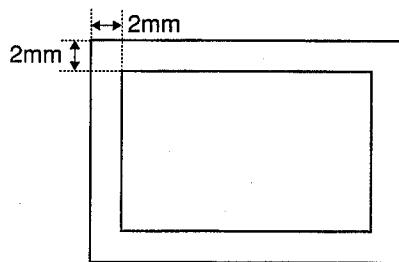
##### 2) MODE (Others)

H:  $|L-R| \leq 3 mm$

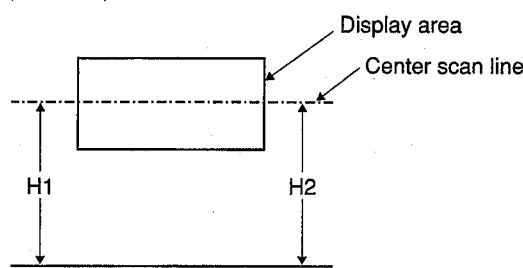
V:  $|L-R| \leq 3 mm$



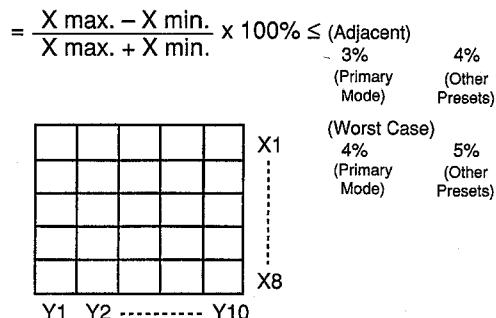
5.6.3 Distortion  
Inside 2.0 mm Frame



5.6.4 Rotation  
 $|H1 - H2| \leq 2 \text{ mm}$



5.6.5 Linearity  
Horizontal & Vertical linearity



<Conditions>

Display Image.....Crosshatch Pattern  
Maximum and minimum values should not be adjacent to each other.

X max. is maximum value among X1~Xm  
X min. is minimum value among X1~Xm

5.7 General performance

5.7.1 Maximum Pixel Clock  
203MHz

5.7.2 Luminance

Luminance Level (Primary Preset and 9300°K only)	32Ft-L +/- 2Ft-L with Contrast at max and Brightness at just extinguished.
Luminance Level (Primary Preset and 9300°K only)	>32Ft-L with Contrast and Brightness at maximum.
Luminance Level (Primary Preset and 9300°K only)	No Visible video with Contrast at minimum and Brightness at just extinguished.
Luminance Level (Primary Preset and 9300°K only)	Blank raster with Contrast at maximum, Brightness at just extinguished, and no active video.

#### 5.7.4 Brightness variation

Value	80%(Mode 6) 75%(Others) Variation = C/A x 100
Conditions	<p>Display image : White full flat field  Luminance : MAX (Contrast : MAX)  (Brightness : Center point)</p> <p>A : Luminance at center position  C : Luminance at position of lowest Brightness</p>

#### 5.7.5 Display area regulation

	Display area variation	Range of variation
Due to Luminance	within 0.5mm	17~95 cd/m <sup>2</sup> (white flat field)
Due to Power Supply	within 0.5mm	AC : 90 - 264V
Due to Temperature	within 0.5mm	20°C ± 20°C

#### 5.7.6 Color Point

##### <Condition>

Display image : White flat at the center of the display area.  
Luminance : Brightness Center point

Contrast	Max	Min
Value	9300K + 8 MPCD x = 0.283 ± 0.015 y = 0.298 ± 0.015	9300K + 8 MPCD x = 0.283 ± 0.015 y = 0.298 ± 0.015

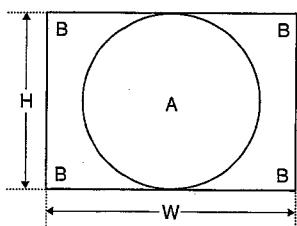
##### <Condition>

Display image : 5% White flat at the center of the display area.  
Luminance : Brightness Center point, Contrast max

Contrast	6500K	5000K
Value	x=0.313(Typ.) y=0.329(Typ.)	x=0.346(Typ.) y=0.359(Typ.)

#### 5.7.7 Misconvergence

Center area of display (A) : 0.25 mm (Max.)  
Corner area of display (B) : 0.35 mm (Max.)  
Out of Area 350 x 262mm (C) : 0.40 mm (Max.)



##### <Conditions>

Display image : Crosshatch pattern mixed with R, G, and B colors.  
Convergence gauge : KLEIN CM7AG or equivalent.  
Display area : W x H 350 x 262 mm

#### 5.7.8 White Uniformity

xa - xc ≤ ± 0.015  
xa : x coordinate at the CRT center  
xc : x coordinate at any other point.

ya - yc ≤ ± 0.015

ya : x coordinate at the CRT center  
yc : x coordinate at any other point.

##### <Conditions>

Display image : White flat field  
Luminance : 95 cd/m<sup>2</sup> at the center of display area.  
Display area : 350 x 262 mm

#### 5.7.9 Purity

Conspicuous mislanding shall not be visible within display area at a distance of 60cm from CRT surface.

##### <Conditions>

Display image : Red/Green/Blue flat field  
Luminance : Contrast max.  
Brightness CENTER  
Display area : 350 x 262 mm

#### 5.7.10 Jitters

Invisible at a distance of 30cm from CRT Surface.

## 6. ENVIRONMENTS

### 6.1 Ambient temperature, humidity and altitude

	Operating	Storage and shopmen
Temperature	0 ~ 40°C (32 ~ 104°F)	-40 ~ +60°C (-40 ~ 140°F)
Humidity	5 ~ 95% *	5 ~ 90%*
Altitude	3.000 m (Max.) (10.000 ft)	12.000 m (Max.) (40.000 ft)

\* Non-condensation

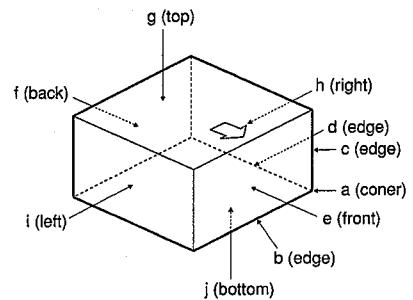
## 6.2 Vibration and shock

### 6.2.1 Vibration

	Order of tests	Direction of Vibration	Acceleration		Frequency	Sweep time	Test time
			Non-operation	Storage and shipment			
Packed	1	Vertical	Up to down		10 m/s <sup>2</sup> (1.0 G)		60 min.
	2	Horizontal	Front to back		10 m/s <sup>2</sup> (1.0 G)	5 - 250 Hz	1.0 oct/min
	3		Right to left				60 min.

### 6.2.2 Shock (Drop test)

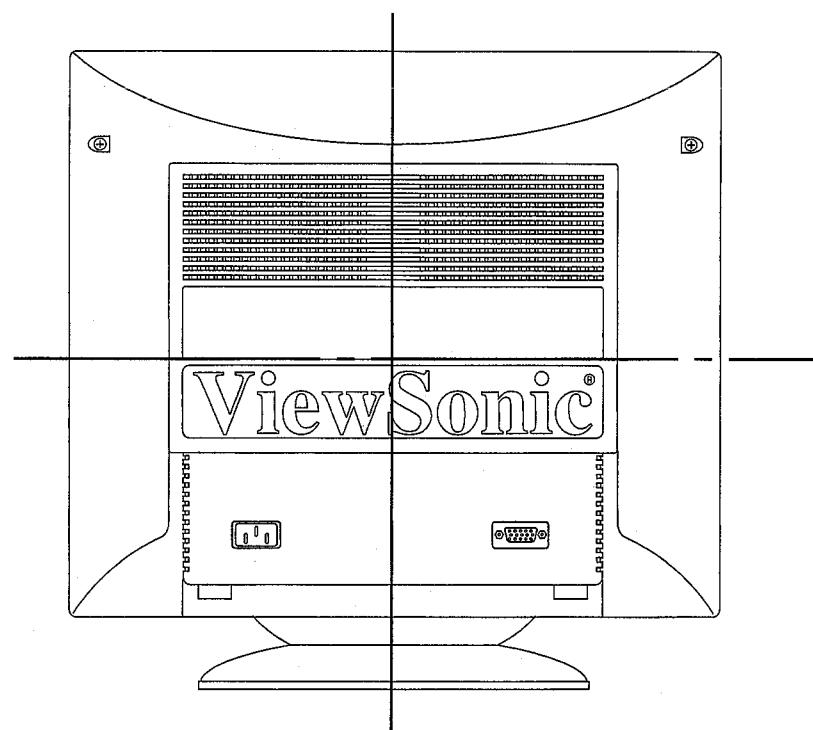
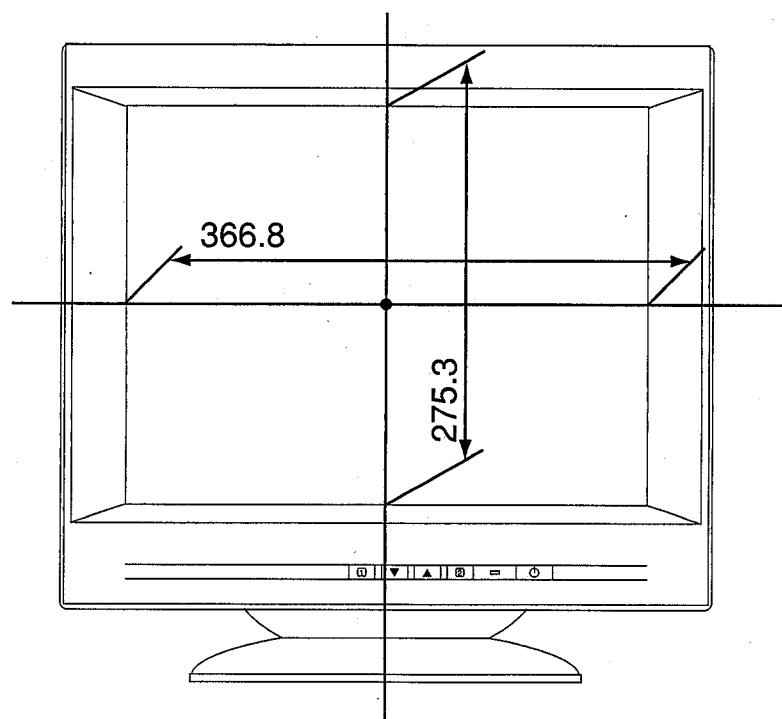
Packed	Order of drop	Face to drop is to face the floor. (See the figure)	Height	Number of drop
	1	a, b, c, d, e, f, g, h, i	61.0 cm	
	2	j	61.0 cm	1 time for each

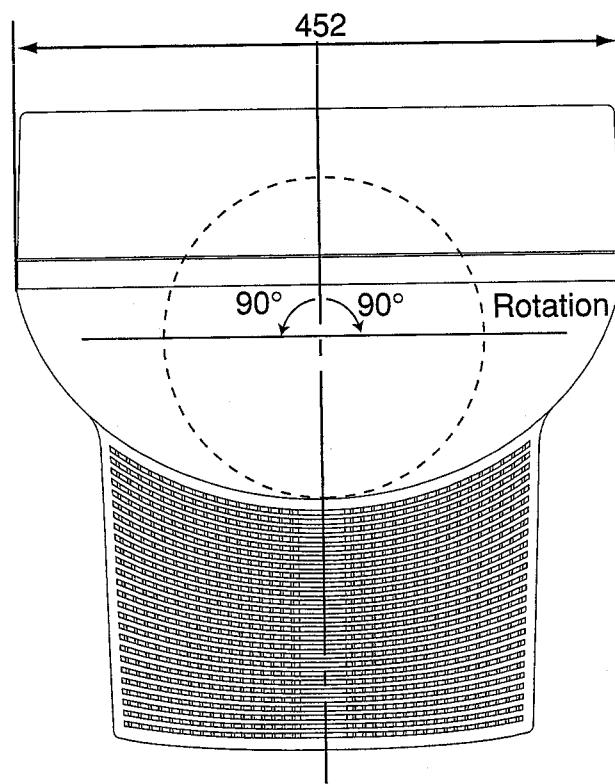
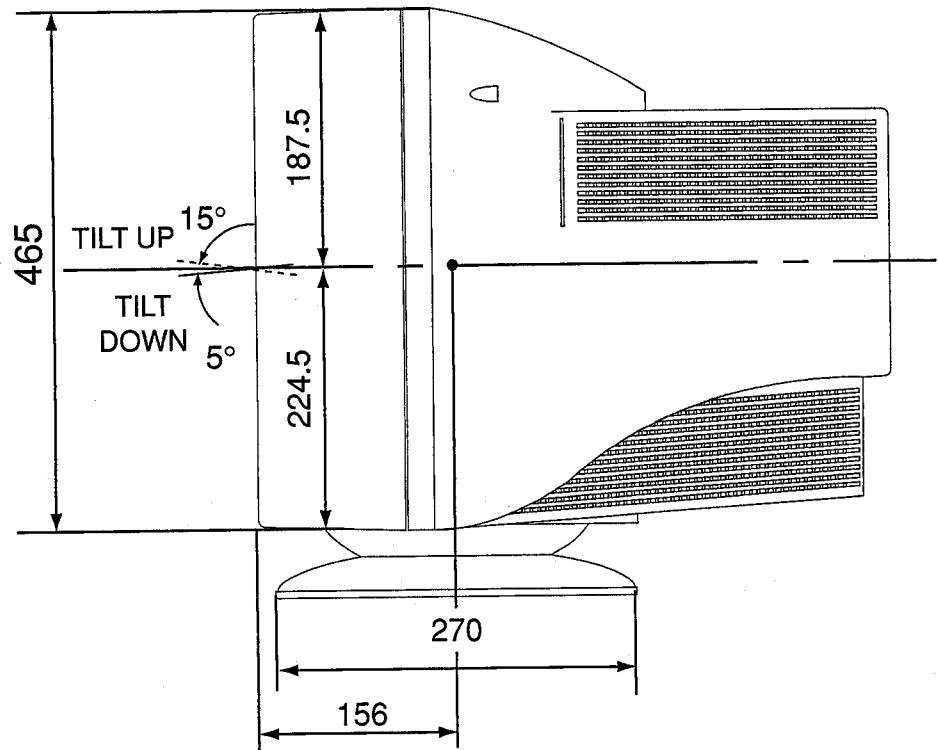


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## DIMENSIONS

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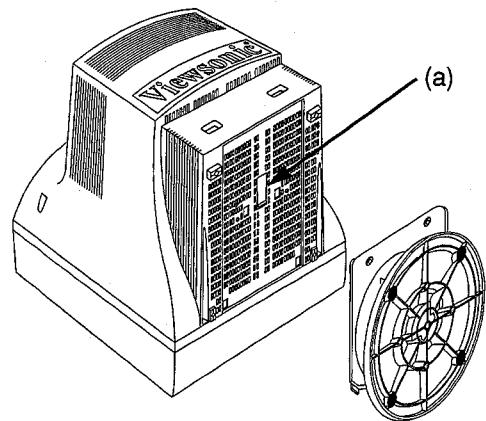




## DISASSEMBLY INSTRUCTION

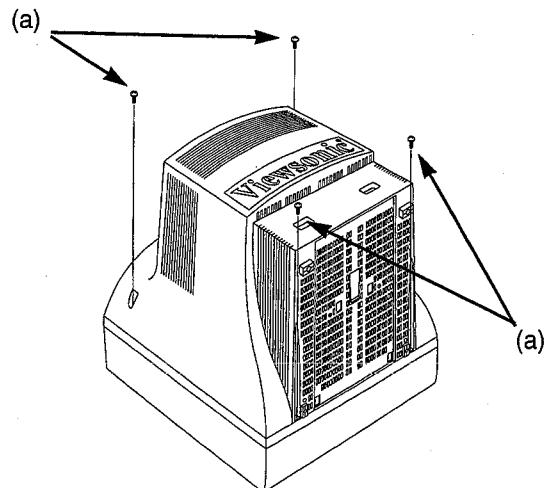
### 1. TILT/SWIVEL REMOVAL

- 1) Set the monitor face downward.
- 2) Pressing the latch (a), carefully remove the Tilt/Swivel by pulling it upward.



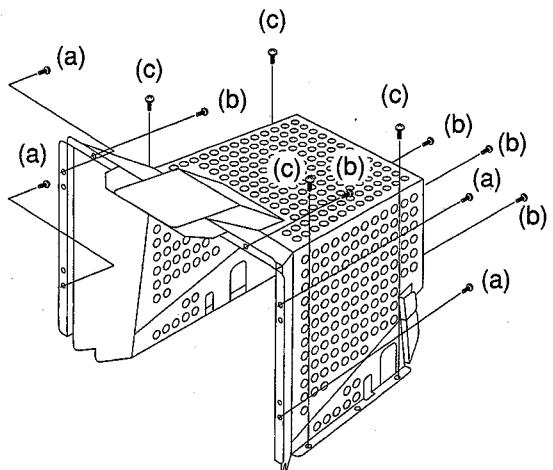
### 2. BACK COVER REMOVAL

- 1) Remove four screws (a).
- 2) Slide the Back Cover away from the Front Cabinet of the monitor.



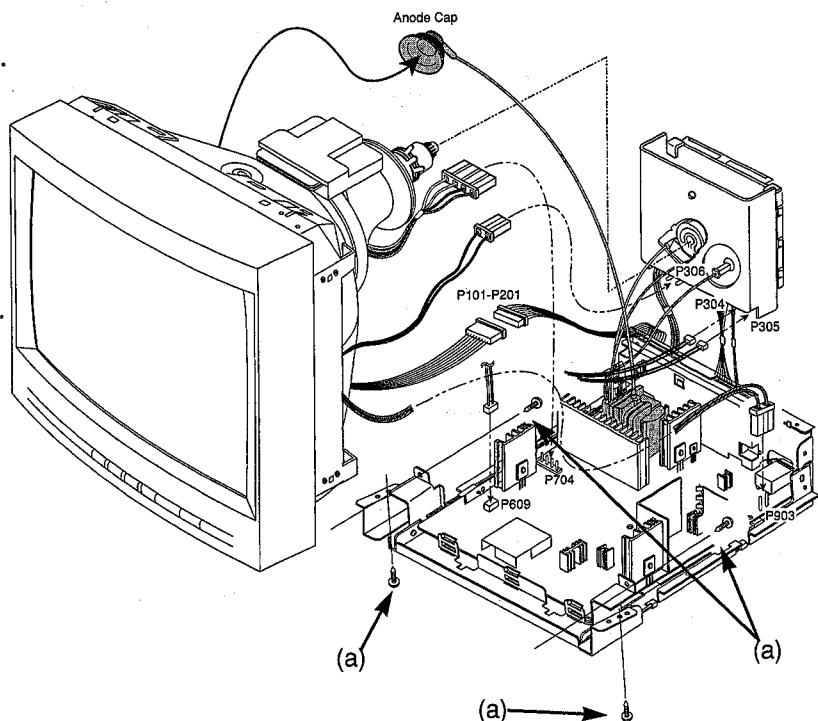
### 3. TOP SHIELD REMOVAL

- 1) Remove four screws (a).
- 2) Remove five screws (b).
- 3) Remove four screws (c).



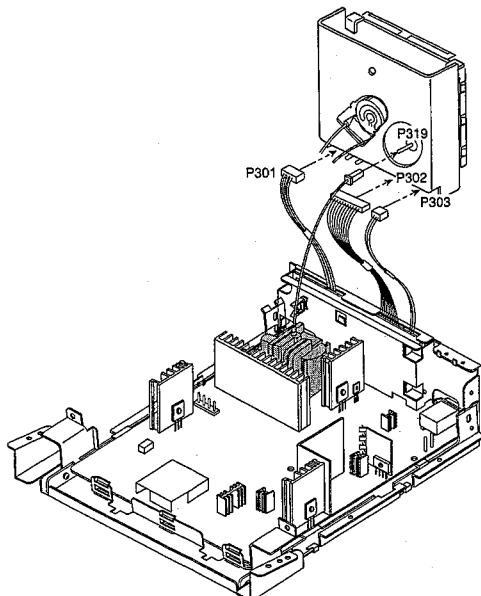
#### 4. TOTAL CHASSIS ASSEMBLY REMOVAL

- 1) Disconnect P903 (Degaussing pin), P704 (DY pin), P609 (Tilt pin), and P610 (Purity pin) from the Main PCB.
- 2) Disconnect P101-P201.
- 3) Disconnect P306 (GND Wire), P304, P305 from the Video PCB.
- 4) Carefully separate the CDT Board Assembly from the CDT neck.
- 5) Discharge the remaining static electricity by shorting between the Anode Cap and the CDT ground.
- 6) Disconnect the Anode Cap from the CDT.
- 7) Remove four screws (a).
- 8) Remove the Front Cabinet and the Total Chassis Assembly from the Main Bracket.



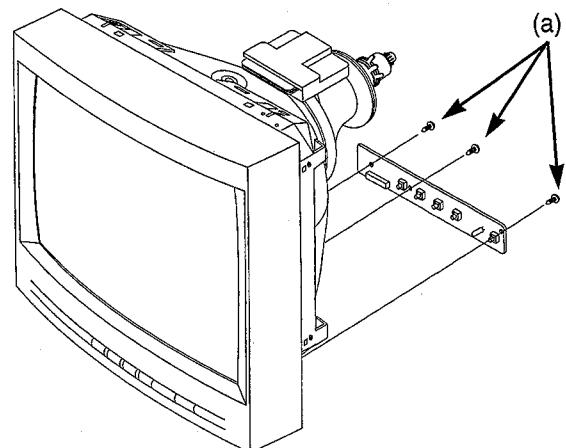
#### 5. VIDEO PCB ASSEMBLY REMOVAL

- 1) Disconnect P301, P302, P303, and P319 from the Video PCB.
- 2) Remove the Video PCB Assembly from the Interface Assembly.



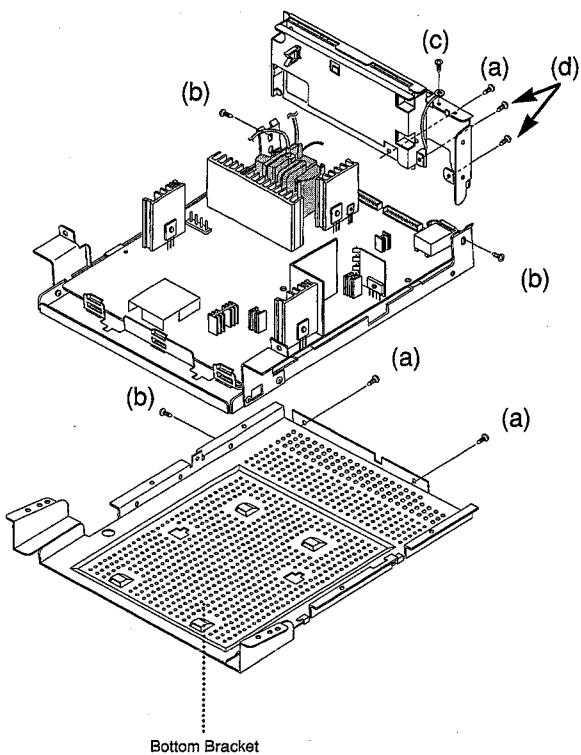
#### 6. CONTROL PCB ASSEMBLY REMOVAL

- 1) Remove three screws (a).
- 2) Remove the Control PCB Assembly from the Front Cabinet.



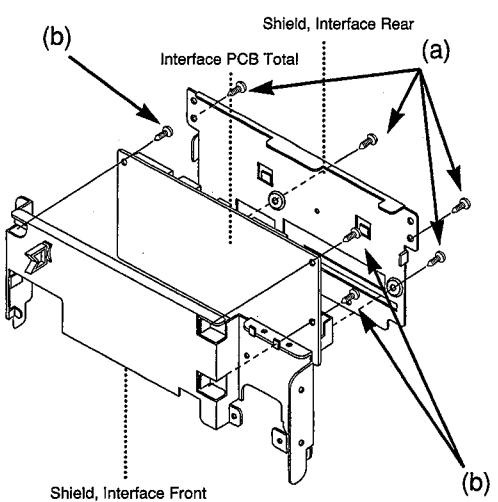
## 7. BOTTOM BRACKET REMOVAL

- 1) Remove three screws (a).
- 2) Remove three screws (b).
- 3) Remove screw (c).
- 4) Remove two screws (d).
- 5) Carefully remove the Interface Assembly from the Main Bracket.
- 6) Remove the Bottom Bracket.



## 8. INTERFACE ASSEMBLY REMOVAL

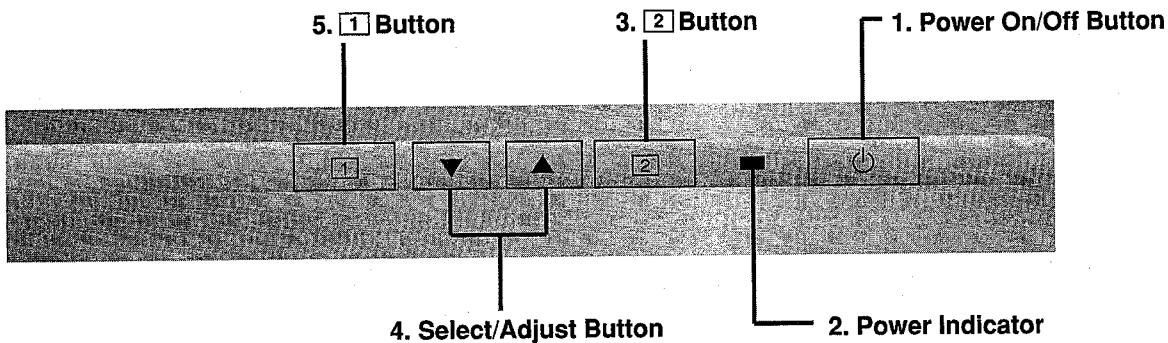
- 1) Remove four screws (a).
- 2) Remove Interface Rear Shield.
- 3) Remove three screws (b).
- 4) Remove the Interface Front Shield and Interface PCB.



## CONTROL LOCATION

## [Basic operation]

## 1. Control Panel & Neams of control



## 2. Functions

### 1) Power ON/OFF Button

To turn monitor on and off.

## 2) Power Indicator

This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, – stand-by, suspend, or power off mode – its color changes to orange.

3) **2** Button

Use the button **2** to display the control screen for the highlighted control (or pair of controls).

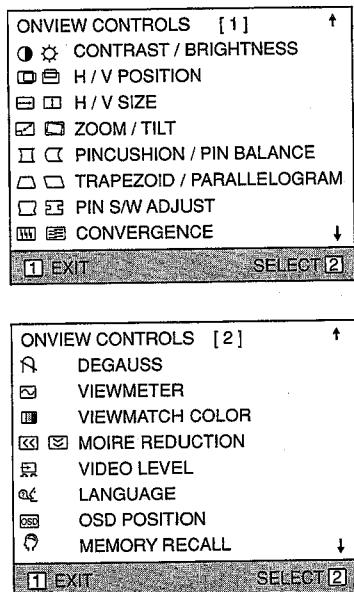
#### 4) Select/Adjustment Button

Use this button for selecting (highlighting) an OSD icon and adjusting level of the selected menu.

5)  1 Button

Use the button **1** to start and exit from the OnView Controls menu.

## Adjustment



Icon	Icon Name
	Contrast/Brightness
	H/V Position
	H/V Size
	Zoom/Tilt
	Pincushion/Pin Balance
	Trapezoid/Parallelogram
	Pin S/W Adjust
	Convergence

Icon	Icon Name
	Degauss
	Viewmeter
	Viewmatch Color
	Moire Reduction
	Video Input Level
	Language
	OSD Position
	Memory Recall

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## CAUTION FOR ADJUSTMENT AND REPAIR

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1. Degaussing is inevitably required at convergence adjustment.
2. If you check or adjust electrical specification or function, more than 20 minutes burn-in is required.
3. Reforming of the lead wire is required after your repair work.
4. Prior to starting work, be sure to check that the input signal is at the specified timing and that the polarity is as specified in all modes.
5. Brightness control : After mounting the rear cover, brightness tends to decrease about 5 cd/m<sup>2</sup> on a flat white field and about 1 cd/m<sup>2</sup> on a white raster field. This should be taken into consideration.
6. Brightness stabilizing time : It takes about 20 to 50 seconds for the brightness to stabilize after turning the power off for 5 seconds (AC). Therefore, care should be taken to this.
7. Aging should be made in white raster of 30 ~ 50 cd/m<sup>2</sup> and raster size, 350 x 262 mm before adjusting the ITC.

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## CAUTION FOR SERVICING

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When servicing or replacing the CRT, high voltage sometimes remains on the anode. So, completely discharge high voltage before servicing or replacing the CRT so as to prevent a shock to the service person.

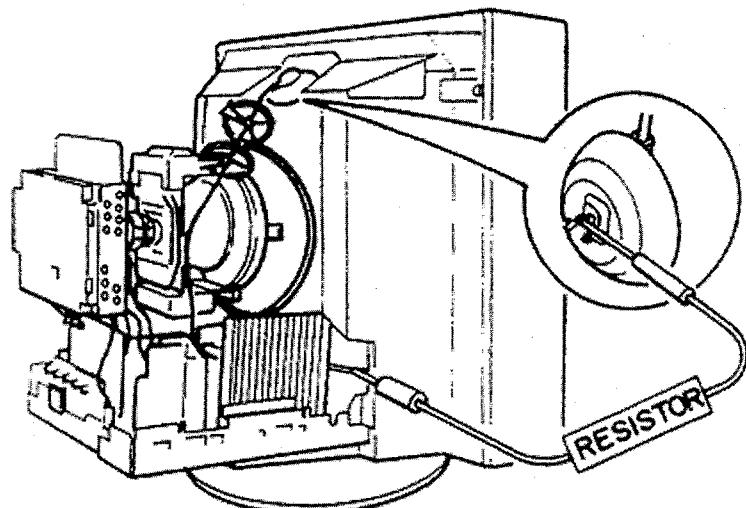
### CRT Anode Discharge

1. When you check the CRT anode or replace the CRT, discharge the CRT anode to the external conductive coating of CRT, especially when checked right after power turn-off.
2. Ground one end of a jumper wire which has a resistor (30kV < resisting pressure 100MΩ) and connect the other point to the CRT anode.

**Note: Grounding must be done first.**

This model has a section that does not share a common ground with the power supply section. The different sections are referred to as the HOT section and the COLD section in the precautions below.

1. Do not touch the HOT section and the COLD section at the same time. You may be hit by an electric shock.
2. Do not short the HOT section to the COLD section. This could blow the fuse or damage parts.
3. Never measure the HOT section and the COLD section at the same time when using tools such as oscilloscopes or multimeters.
4. Always unplug the unit before beginning any operation such as removing the chassis.



# ADJUSTMENT AND CHECK PROCEDURE

## INTRODUCTION

• This monitor is controlled by a microcomputer. With the exception convergence/focus all is digitally adjusted. Therefore a computer, the dedicated control software, the dedicated Adaptor, a 9~12V power supply, and a signal generator are required servicing.

## TOOLS REQUIRED

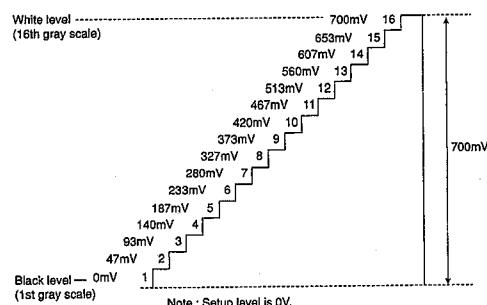
- Alignment appliances and tools.
  - IBM compatible PC.
  - Programmable Signal Generator.  
(eg. VG-819 made by Astrodesign Co.)
  - EPROM or EEPROM with saved each mode data.
- Alignment Adaptor and Software.
- Digital Voltmeter.
- White Balance Meter.
- Luminance Meter.
- High-voltage Meter.
- Control Software

The E790 models can only use adjustment program disk for this model. No other program can access the EEPROM on the monitor. For further information please contact our sales office.

## PROCEDURE

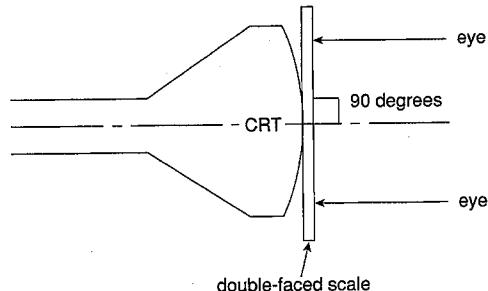
• Signal timing :	Preset timing
• Display pattern :	White, full "H" character
• Signal level :	V/H: TTL level video: 700mV
• Input source :	AC 100 ~ 240 V, 50/60 Hz
• Ambient temperature :	Room temperature
• Warm-up time :	More than 30 minutes
• Brightness control :	Center
• Contrast control :	Max.
• Magnetic field : Vertical:	40 $\mu$ T Horizontal: 0 $\mu$ T
• Signal cable:	Attached

Video input signal from PC.

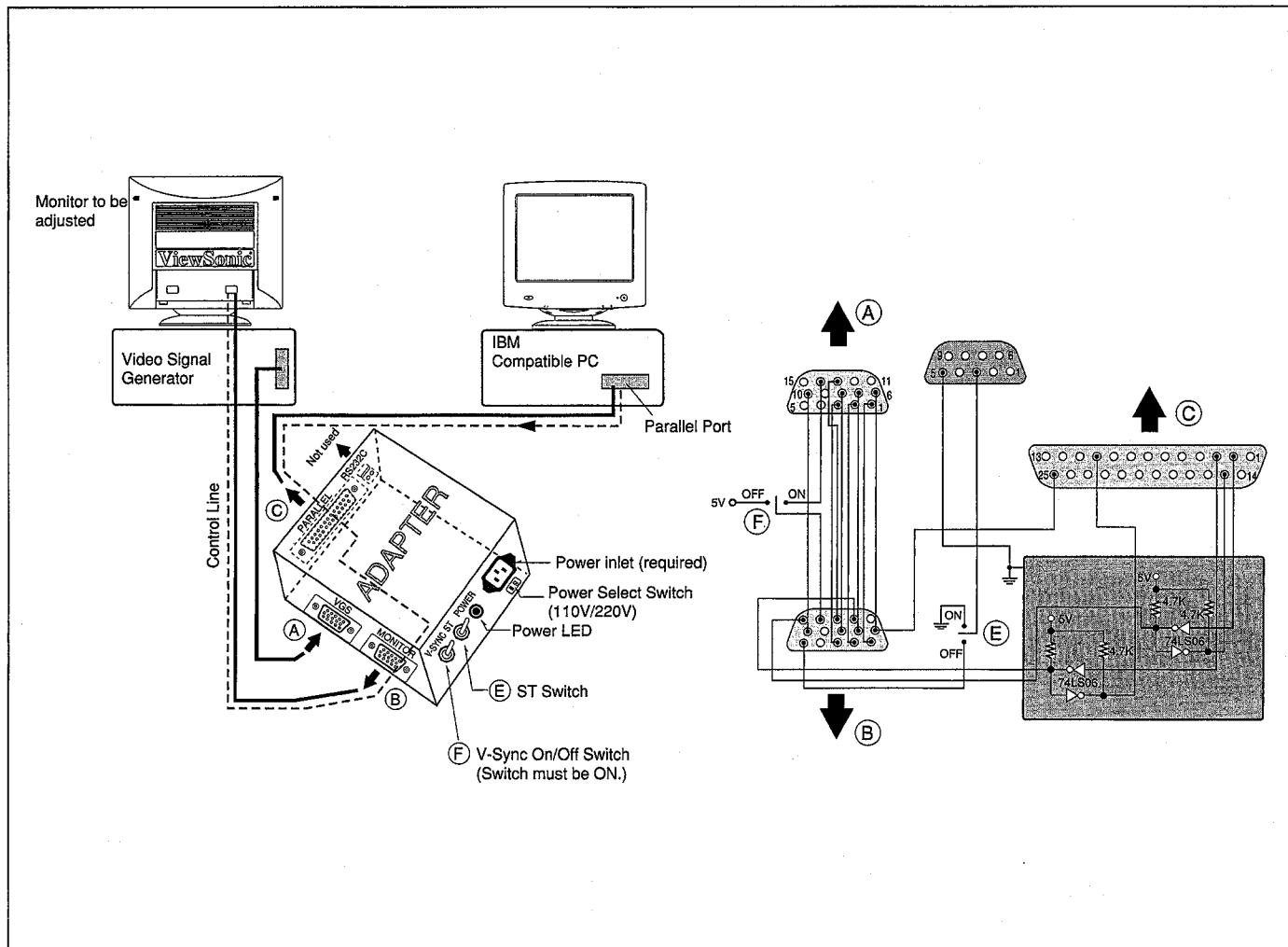


- Use a Helmholtz device to adjust a unit with no horizontal magnetic field and a vertical field of 40  $\mu$ T. Inspect the unit under the same conditions.
- The ambient illuminance must be 200 lux.
- Use an external degaussing coil any time the DEGAUSS switch does not remove color shading.
- To check the image width, height, linearity and distortion, proceed as below.

## STANDARD CONDITION OF ADJUSTMENT



• Figure 1. Cable Connection



## ADJUSTMENT SOFTWARE

### 1. Software operating procedure

- A) Power on the computer.
- B) Connect the communication cable for monitor adjustment.

C) Insert the adjustment disk into the drive.

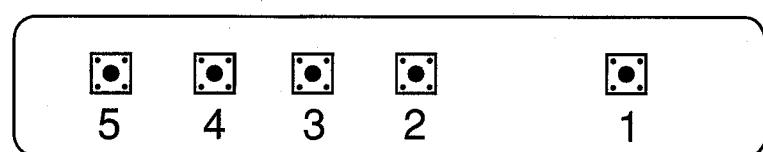
- D) At the A: > prompt type "E790", then press [ENTER].
- E) Refer to the adjustment procedures.

### 2. Adjustment Program

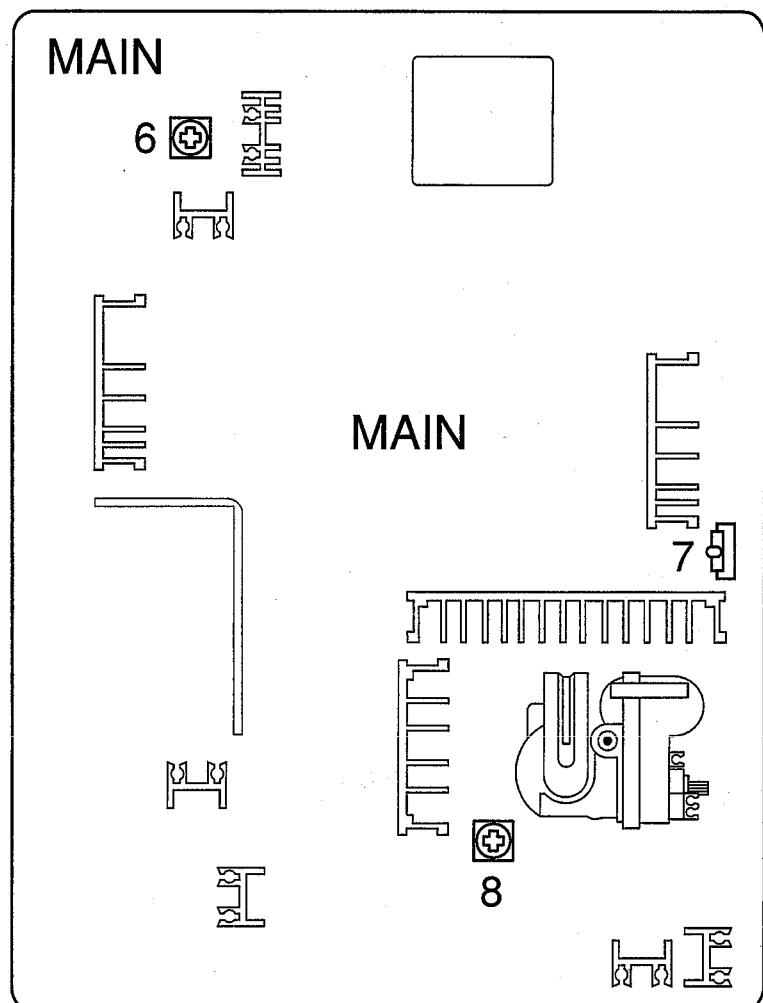
Main Menu of Adjustment Program

E790 Models ADJUSTMENT PROGRAM MENU			
• DIST.ADJ	FOS.ADJ BALANCE TILT MISCELLA2 HSMAX	• EDIT	MODEL SEL EDID INFO ADJ INFO
• COLOR ADJ	DRIVE ADJ BAIS ADJ LUMINANCE DEGAUSS	• EEPROM	ALL CLEAR WRITE EDID EEPROM-1 EEPROM-2
• COMMAND	PRESET START RESET EXIT	• QUIT	

## SERVICE ADJUSTMENT CONTROL LOCATION



### CONTROL



NO.	Ref. No.	Control Function	NO.	Ref. No.	Control Function
1	SW101	POWER BUTTON	5	SW102	1 BUTTON
2	SW105	2 BUTTON	6	VR901	B+ ADJUSTMENT
3	SW104	▲ BUTTON	7	SC701	RASTER CENTER SELECT
4	SW103	▼ BUTTON	8	VR501	HIGH VOLTAGE ADJUSTMENT

## REQUIRED ADJUSTMENT PROCEDURE AFTER A PART IS REPLACED (✓ IS REQUIRED)

* ADJUSTMENT ITEM		REPLACED PARTS						
		MAIN PCB	VIDEO PCB	CRT D.Y	IC402	FBT		
A	190V ADJUST	✓			✓			
B	PRESET ADJUST	✓			✓			
C	BRIGHTNESS, COLOR	✓	✓		✓			
D	FOCUS ADJUST	✓				✓		
E	DDC DATA SETTING	✓			✓			

## ADJUSTMENT PROCEDURE

Note 1 : Check to be sure that the program disk name is **E790** before making necessary adjustment.

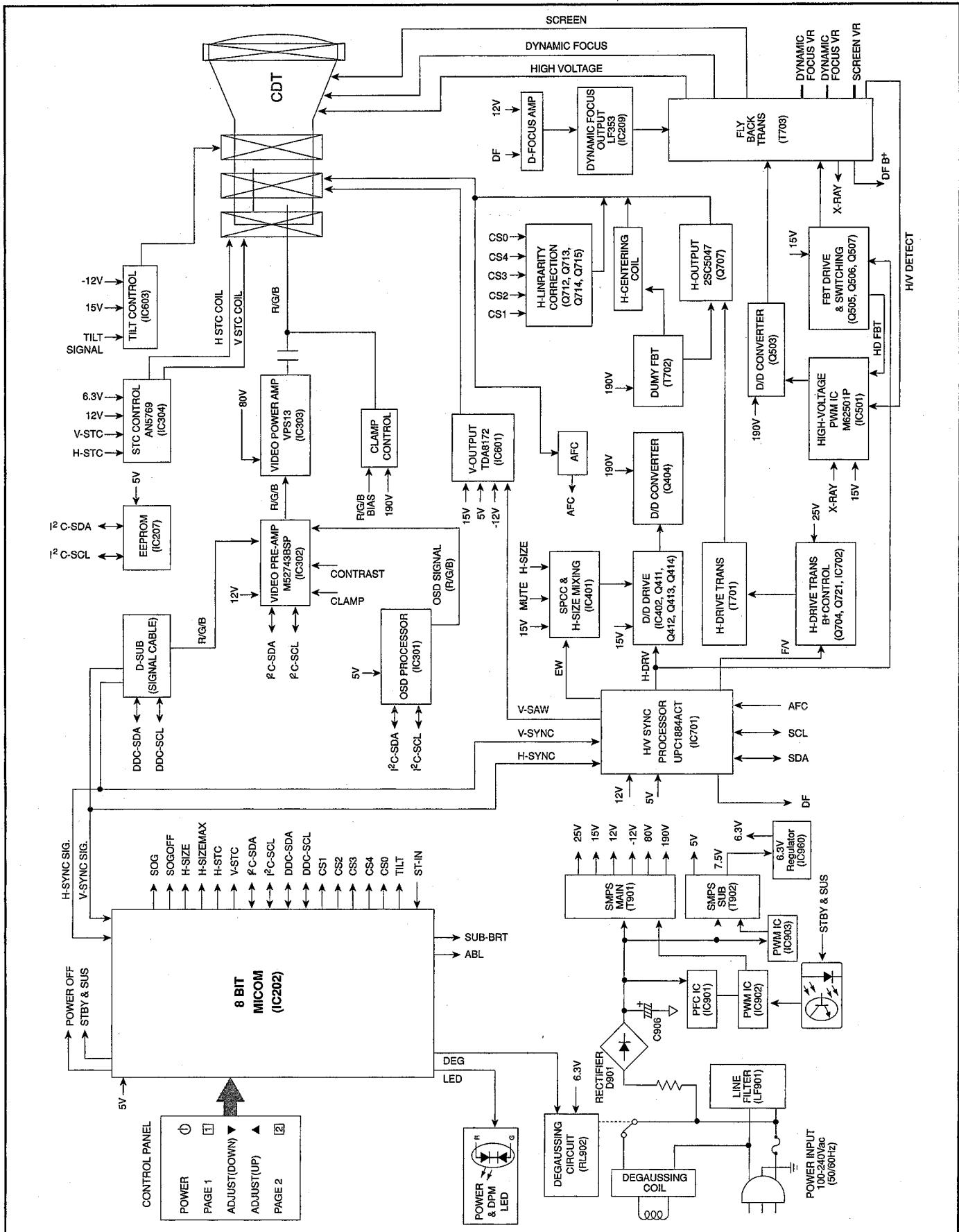
Note 2 : Unless otherwise specified, the monitor state is as given at right.

### 1. Description of Adjustment Method

ITEM		Operation	Adjustment Value
Program Menu		Operation	Adjustment Value
A	190V ADJUST	<ul style="list-style-type: none"> <li>◊ Test Meter</li> <li>▼ TEST point</li> <li><input type="checkbox"/> Pattern</li> </ul> <p>① Turn on the power switch of the monitor.      ② Check that the input signal to the monitor is [f<sub>H</sub> 79.98kHz] and [f<sub>V</sub> 75Hz].      ③ Turn the VR901 and set the 190V.</p>	190 V ± 0.5V
B	PRESET ADJUST.	<ul style="list-style-type: none"> <li>◊ IBM Compatible PC</li> <li>◊ Programmable Signal Generator. (eg. VG819 made by Astrodesign Co.)</li> <li>◊ Alignment Adapter and Software.</li> <li><input type="checkbox"/> Crosshatch</li> </ul> <p>① Display f<sub>H</sub>: 94kHz, signal (f<sub>V</sub>: Don't care)      ② Run alignment program for E790 on the IBM compatible PC.      ③ EEPROM → ALL CLEAR → Y(YES) COMMAND.      ④ HSMAX adjust. (f<sub>H</sub>: 68.8kHz) VESA STD Signal      ⑤ Display cross hatch pattern at Mode 1. [f<sub>H</sub> 31kHz, f<sub>V</sub> 80 Hz]      ⑥ COMMAND → PRESET START → Y (YES) COMMAND.      ⑦ DIST. ADJ. → TILT COMMAND.      ⑧ Adjust tilt as arrow keys to be the best condition.      ⑨ DIST. ADJ. → BALANCE command.      ⑩ Adjust balance of side-pincusion as arrow keys to be the best condition.      ⑪ DIST. ADJ. → BALANCE command.      ⑫ Adjust parallelogram as arrow keys to be the best condition.      ⑬ DIST. ADJ. → FOS. ADJ → Mode No. → 1 command.      ⑭ Adjust H-SIZE as arrow keys to 350±1mm.      ⑮ Adjust H-POSITION as arrow keys to center of the screen.      ⑯ Adjust V-SIZE as arrow keys to 262±1mm.      ⑰ Adjust V-POSITION as arrow keys to center of the screen.      ⑱ Adjust spcc (side-pincusion) as arrow keys to be the best condition.      ⑲ Adjust TRAPEZOID as arrow keys to be the best condition.      ⑳ Display from Mode 2 to Mode 11 and repeat about from Number ⑪ to ⑯.      ㉑ PRESET EXIT → Y (YES) command.</p>	

ITEM	Program Menu	Operation	Adjustment Value
C	BRIGHTNESS, COLOR	<p>◊ Test Meter ▼ TEST point □ Pattern</p> <p>◊ IBM Compatible PC ◊ Programmable Signal Generator. (eg. VG819 made by Astrodesign Co.) ◊ Alignment Adapter and Software. ◊ White Blance Meter. ◊ Luminance Meter.</p> <p>• Set the EXT-Brightness and EXT-Contrast to Max position.</p> <p><b>①</b> Set the White Blance Meter.</p> <p><b>②</b> Press the (DEGAUSSING) on the OSD menu for demagnetization of the CDT.</p> <p><b>③</b> COMMAND → PRESET START → Y(YES) command.</p> <p><b>④</b> COLOR ADJ → LUMINANCE command.</p> <p><b>⑤</b> Set the ABL to 150. (betwen 0 ~ 255).</p> <p><b>②</b> Brightness</p> <p><b>①</b> COLOR ADJ → BIAS ADJ → COLOR No. → 1 command of the alignment program.</p> <p><b>②</b> Set Sub-Bright to max position and R-BIAS and G-BIAS to min position and B-BIAS to 130(decimal) Position.</p> <p><b>③</b> Adjust B-BIAS command to <math>0.35 \pm 0.05</math>FL on the White Blance Meter with PC arrow keys.</p> <p><b>④</b> Adjust R-BIAS and G-BIAS command to <math>x=0.283 \pm 0.006</math> and <math>y=0.298 \pm 0.006</math> on the White Blance Meter with PC Arrow keys.</p> <p><b>⑤</b> Adjust Sub-Bright command to <math>0.35 \pm 0.05</math> of the Raster Luminance.</p> <p><b>③</b> Color</p> <p><b>①</b> Display color 15,0 box pattern (70x70mm) at Mode 6.</p> <p><b>②</b> DRIVE ADJ → No.1 command.</p> <p><b>③</b> Set Sub-CONTRAST to max position.</p> <p><b>④</b> Set B-DRIVE to 100(decimal) at DRIVE of the alignment program.</p> <p><b>⑤</b> Adjust R-DRIVE and G-DRIVE command to white balance <math>x= 0.283 \pm 0.003</math> and <math>y=0.298 \pm 0.003</math> on the White Balance Meter with PC arrow keys.</p> <p><b>⑥</b> Adjust SUB-CONTRAST command to <math>50 \pm 1</math>FL of the color 15,0 Box pattern (70x70mm) luminance at Mode 6.</p> <p><b>⑦</b> COMMAND → PRESET EXIT command.</p> <p><b>⑧</b> Display color 15,0 full white pattern at Mode 6.</p> <p><b>⑨</b> Set Brightness to center.</p> <p><b>⑩</b> COLOR ADJ. → LUNMINANCE → ABL command.</p> <p><b>⑪</b> Adjust ABL to <math>31 \pm 0.2</math>FL of the luminance.</p> <p><b>⑫</b> EXIT from the program.</p>	
D	FOCUS ADJSUT	<p>□ H-Character</p> <p>① Set the Brightness and Contrast to Max position.</p> <p>② Display H-Character in full screen at Mode 6. [fH : 79.98kHz, fv : 75 Hz]</p> <p>③ Adjust two Focus control on the FBT that should be the best condition.</p>	
E	DDC DATA SETTING	<p>◊ IBM Compatible PC ◊ Alignment Adapter and Software.</p> <p>① Run alignment program for E790 on the IBM compatible PC.</p> <p>② EEPROM → WRITE EDID</p> <p>③ Check the following message " EDID write OK!!"</p> <p>④ EXIT from the program.</p>	

## BLOCK DIAGRAM



## DESCRIPTION OF BLOCK DIAGRAM

### 1. Line Filter & Associated Circuit.

This is used for suppressing noise of power input line flowing into the monitor and/or some noise generated in this monitor flowing out through the power input line. That is to say, this circuit prevents interference between the monitor and other electric appliances.

### 2. Degauss Circuit & Coil.

The degauss circuit consists of the degaussing coil, the PTC (Positive Temperature Coefficient) thermistor (TH901), and the relay (RL902). This circuit eliminates abnormal color of the screen automatically by degaussing the shadow mask in the CDT when turn on the power switch.

When you need to degauss while using the monitor, select DEGAUSS in the ETC on the OSD menu.

### 3. SMPS (Switching Mode Power Supply).

This circuit works with power of 110-240Vac (50/60Hz).

The operation procedure is as follows:

- 1) AC input voltage is rectified and smoothed by the bridge diode (D901) and the capacitor (C906).
- 2) The rectified voltage (DC voltage) is applied to the primary coil of the transformer (T901, T902) and PFC IC (IC901).
- 3) The PFC (Power Factor Correction) IC (IC901) corrects power factor caused by different between current phase and voltage phase.
- 4) The control IC (IC902) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
- 5) Depending on the turn ratio of the transformer, the secondary voltages appear at the secondary coil of the transformer (T901).
- 6) These secondary voltages are rectified by each diode (D921, D922, D924, D925, D926, D927, D931, D932) and operate the other circuits. (Deflection, Video Amplifier, etc.)
- 7) The switching IC (IC903) controls input-pulse-width and generates secondary voltages by sub-transformer (T902).

### 4. Display Power Management Circuit.

This circuit control power consumption of the monitor by detecting H and V sync signal. There are stand-by and suspend mode. When no horizontal or vertical sync signal input, the circuit consists of Q903 and IC916 becomes stand-by and suspend mode. It's power consumption is below 8W.

### 5. X-ray Protection.

This circuit detects the rectified DC voltage comes from the FBT pin 4. If the high voltage of the FBT reaches up to about 30kV (abnormal state), high voltage control PWM IC (IC501) detects it. And PWM IC (IC501) prevent output voltage to the gate of high-voltage-D/D-convert-transistor (Q503). It stops B<sup>+</sup> voltage supplied to the FBT (T703), and high voltage is not be generated, (In the normal state, the high voltage is about 26kV.)

### 6. Micom (Microprocessor) Circuit.

The operating procedure of Micom (Microprocessor) and its associated circuit is as follows:

- 1) H and V sync signal is supplied from the D-Sub to the Micom (IC202).
- 2) The Micom (IC202) distinguishes polarity and frequency of H and V sync.
- 3) The Micom controls each OSD function signals. (H-size, H-position, V-size, etc.)
- 4) The controlled data of each mode is stored in IC207. User can adjust screen condition by each OSD function. The data of the adjust screen condition is stored automatically.

### 7. Horizontal and Vertical Synchronous Processor.

This circuit generates the horizontal drive pulse and the vertical drive pulse by taking sync-signal from the D-SUB (P202). This circuit consists of the  $\mu$ PC1884ACT (IC701) and the associated circuit.

### 8. Oscillating Circuit for D/D Converter.

This circuit generates the saw-tooth wave which has the horizontal period by taking the output of the  $\mu$ PC1884ACT (IC701).

### 9. D/D (DC to DC) Converter.

This circuit supplies DC voltage to the horizontal deflection output circuit by decreasing DC 190V which is the secondary voltage of the SMPS in accordance with the input horizontal sync signal.

### 10. Side-Pincushion Correcting Circuit.

This circuit improves the Side-pincushion of the screen by mixing east-west wave to the output of the horizontal deflection D/D converter which is used for the supply voltage source (B<sup>+</sup>) of the deflection circuit.

### **11. D/D Drive & Convert Circuit.**

This circuit is used for supplying  $B^+$  voltage to horizontal deflection output transistor (Q707). This circuit makes to add side-pincushion correcting signal to  $B^+$  voltage.

### **12. Horizontal Deflection Output Circuit.**

This circuit makes the horizontal deflection by supplying the saw-tooth current to the horizontal deflection yoke.

### **13. High Voltage Output & FBT (Flyback Transformer).**

The high voltage output circuit is used for generating pulse wave to the primary coil of the FBT (Flyback Transformer (T703)). A boosted voltage (about 26kV) appears at the secondary of the FBT and it is supplied to the anode of the CDT.

And there are another output voltages such as the dynamic focus voltage.

### **14. H-Linearity Correction Circuit.**

This circuit corrects the horizontal linearity for each horizontal sync frequency.

### **15. H-Raster Centering Circuit.**

This circuit makes the back raster stay in the center of the screen by selecting the switch (SC701).

### **16. Vertical Output Circuit.**

This circuit takes the vertical ramp wave from the UPC1884ACT (IC701) and performs the vertical deflection by supplying the saw-tooth wave current from the TDA8172 (IC601) to the vertical deflection yoke.

### **17. Dynamic Focus Output Circuit.**

This circuit takes H and V parabola wave from the UPC1884ACT (IC701), and amplifies these waves to offer to the FBT (T703).

### **18. H & V Blanking and Brightness Control.**

This circuit eliminates the retrace line by supplying a negative pulse to the G1 of the CDT. The brightness control circuit is used to control of the screen brightness by changing the DC level of G1.

### **19. Image Rotation (Tilt) Circuit.**

This circuit corrects the tilt of the screen by supplying the image rotation signal to the tilt coil which is attached to the CDT near the deflection.

### **20. Static Convergence Control Circuit.**

This circuit corrects the convergence of the screen by supplying the convergence signal to the 4H (STC) coil which is attached to the CDT near the deflection.

### **21. Moiré Reduction Circuit**

This circuit reduce interference between the periodical display pattern and the CDT's slot (or dot).

The positions of every other one dot video signal beams (red, green, and blue beam) are shifted finely, thus reducing interference.

### **22. OSD Circuit.**

This circuit is used for performing the OSD (On-Screen-Display) function.

When a user selects the OSD Select/Adjustment control, the adjustment status displays on the screen.

### **23. Video Pre-Amp Circuit.**

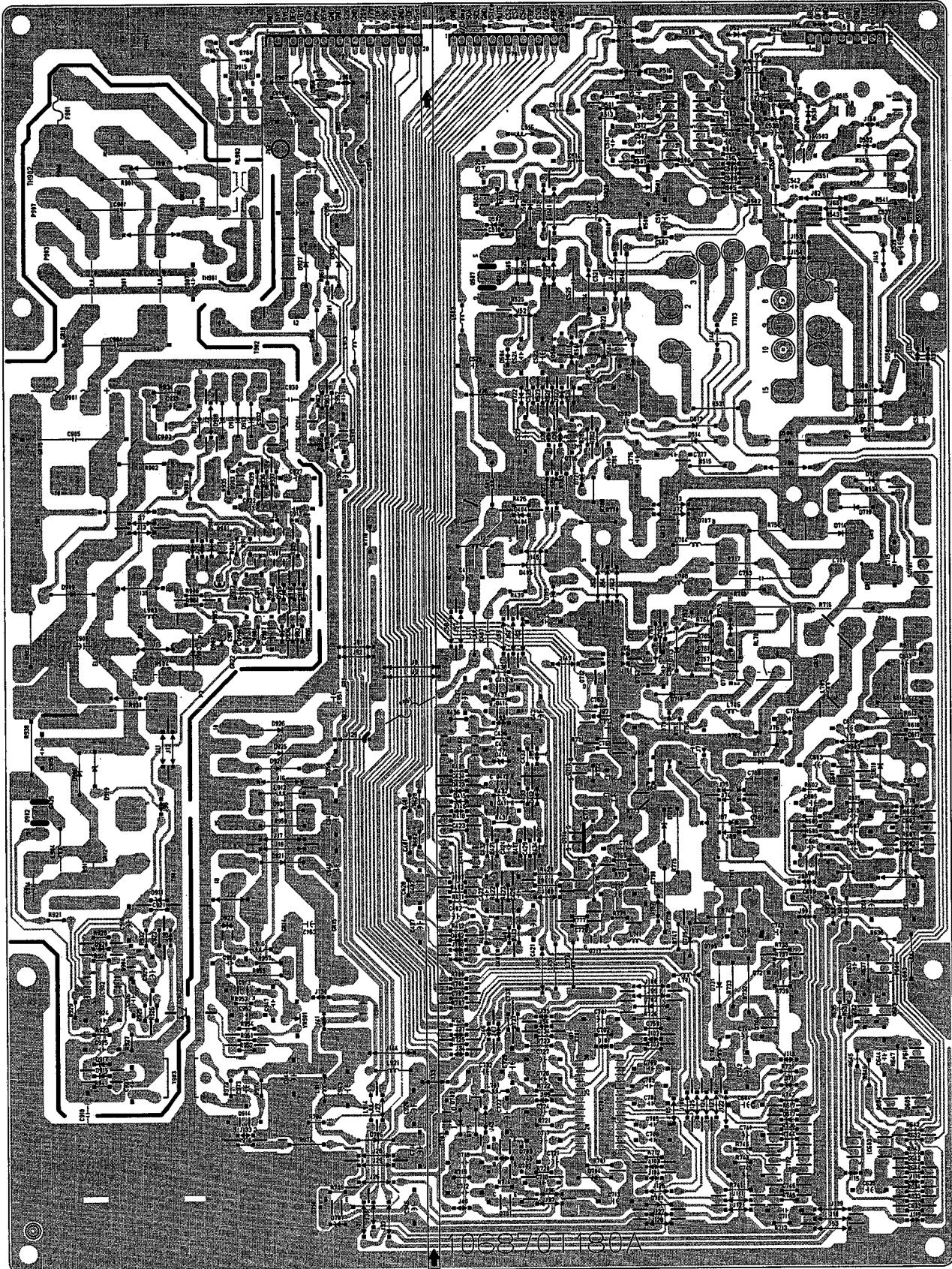
This circuit amplifies the analog video signal from 0-0.7V to 0-4V. This circuit is operated by taking the clamp, R, G, B drives, and contrast signals from the Micom (IC202).

### **24. Video Output Amp Circuit.**

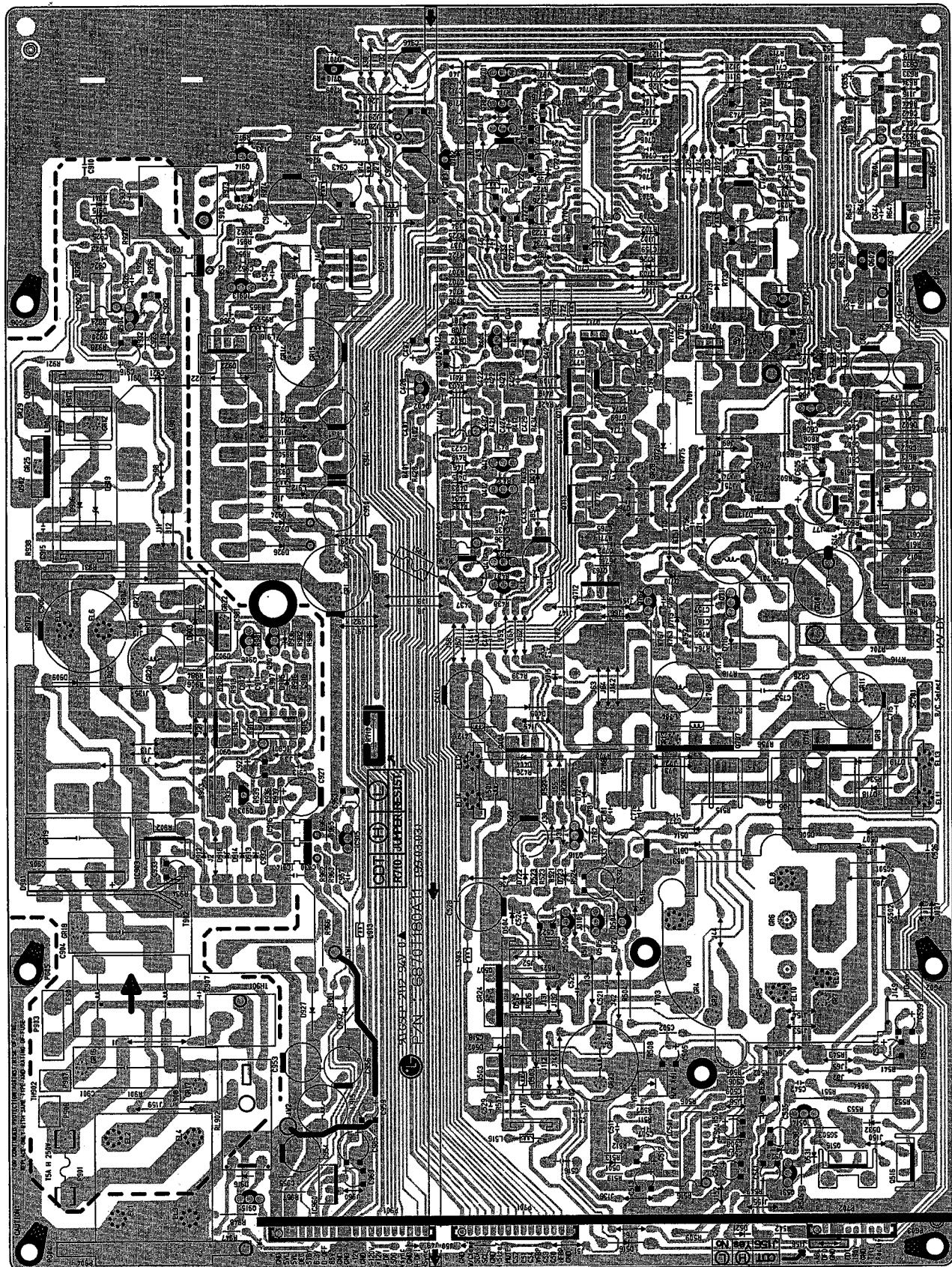
This circuit amplifies the video signal which comes from the video pre-amp circuit and amplified video signal is applied to the CDT cathode.

## CONDUCTOR VIEW

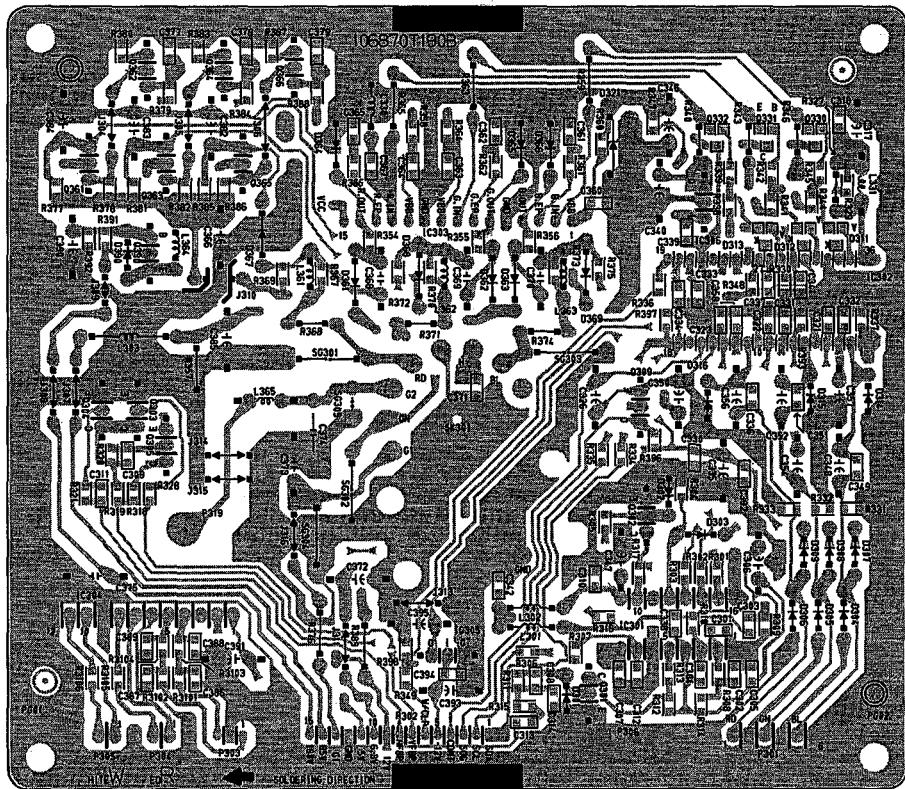
### 1. MAIN BOARD (Solder Side)



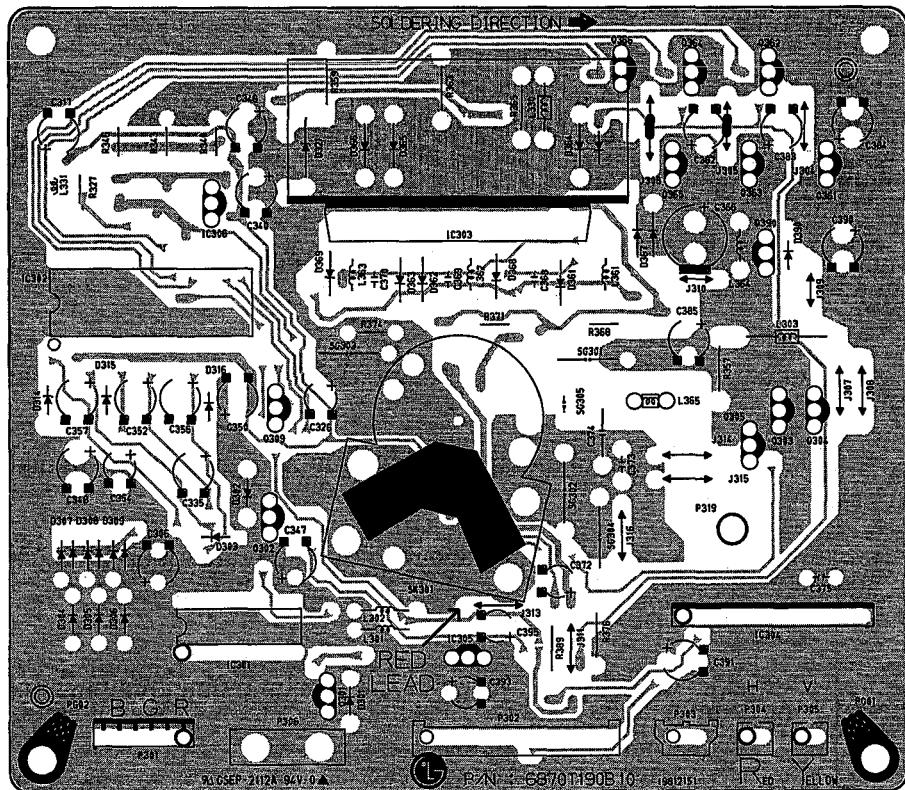
## 2. MAIN BOARD (Parts Side)



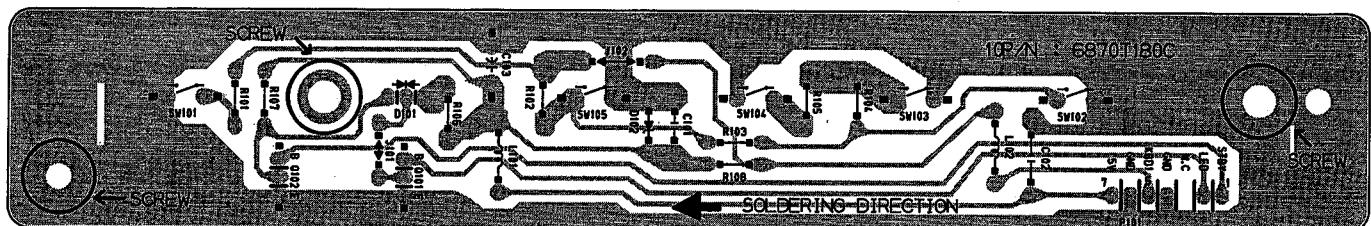
### 3. VIDEO BOARD (Solder Side)



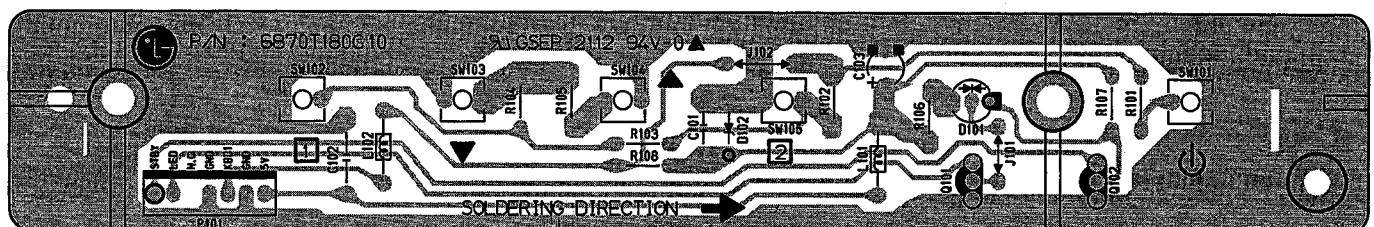
### 4. VIDEO BOARD (Parts Side)



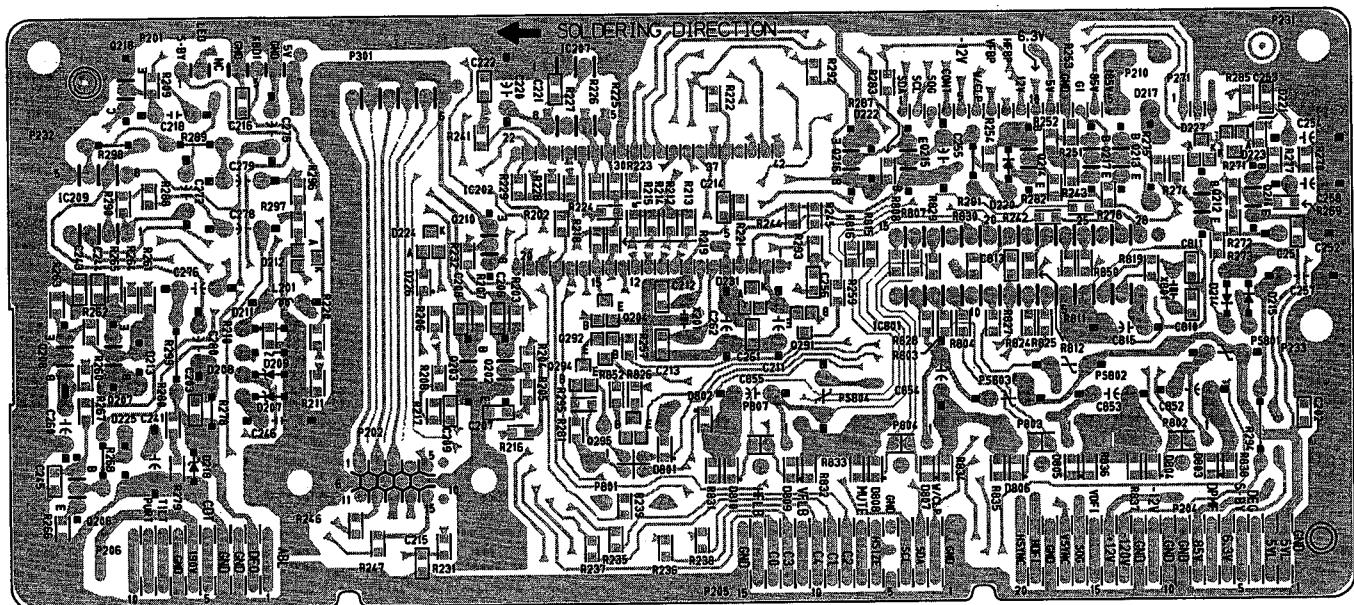
## 5. CONTROL BOARD (Solder Side)



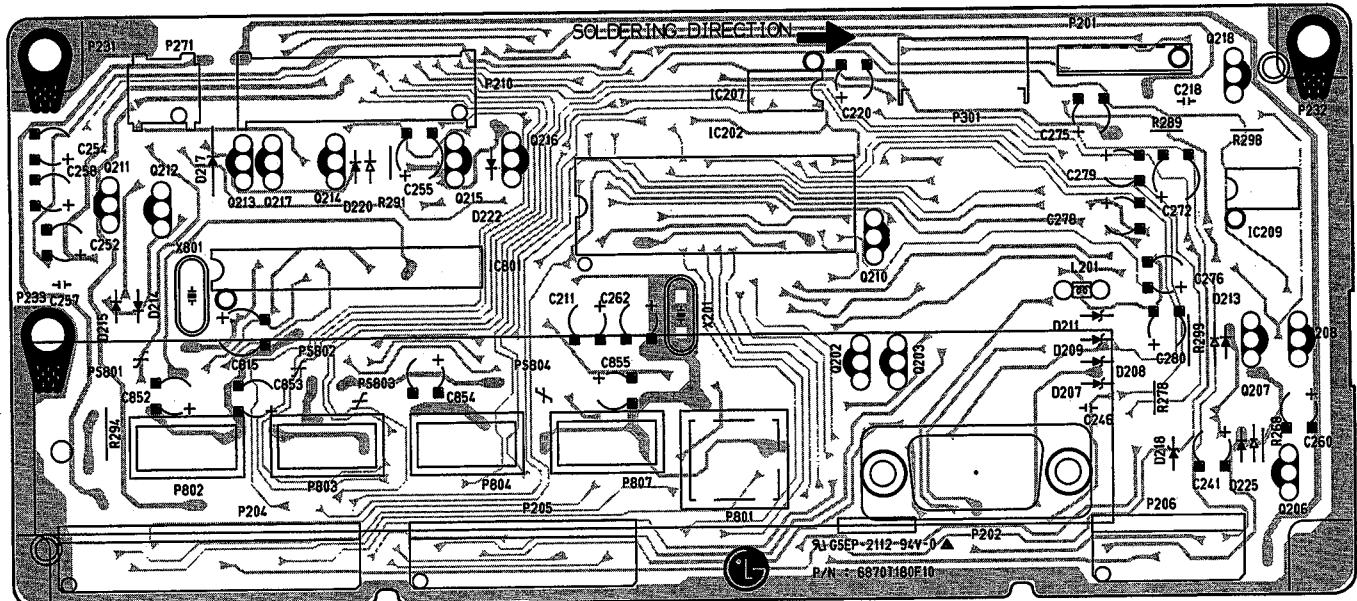
## 6. CONTROL BOARD (Parts Side)



## 7. INTERFACE BOARD (Solder Side)

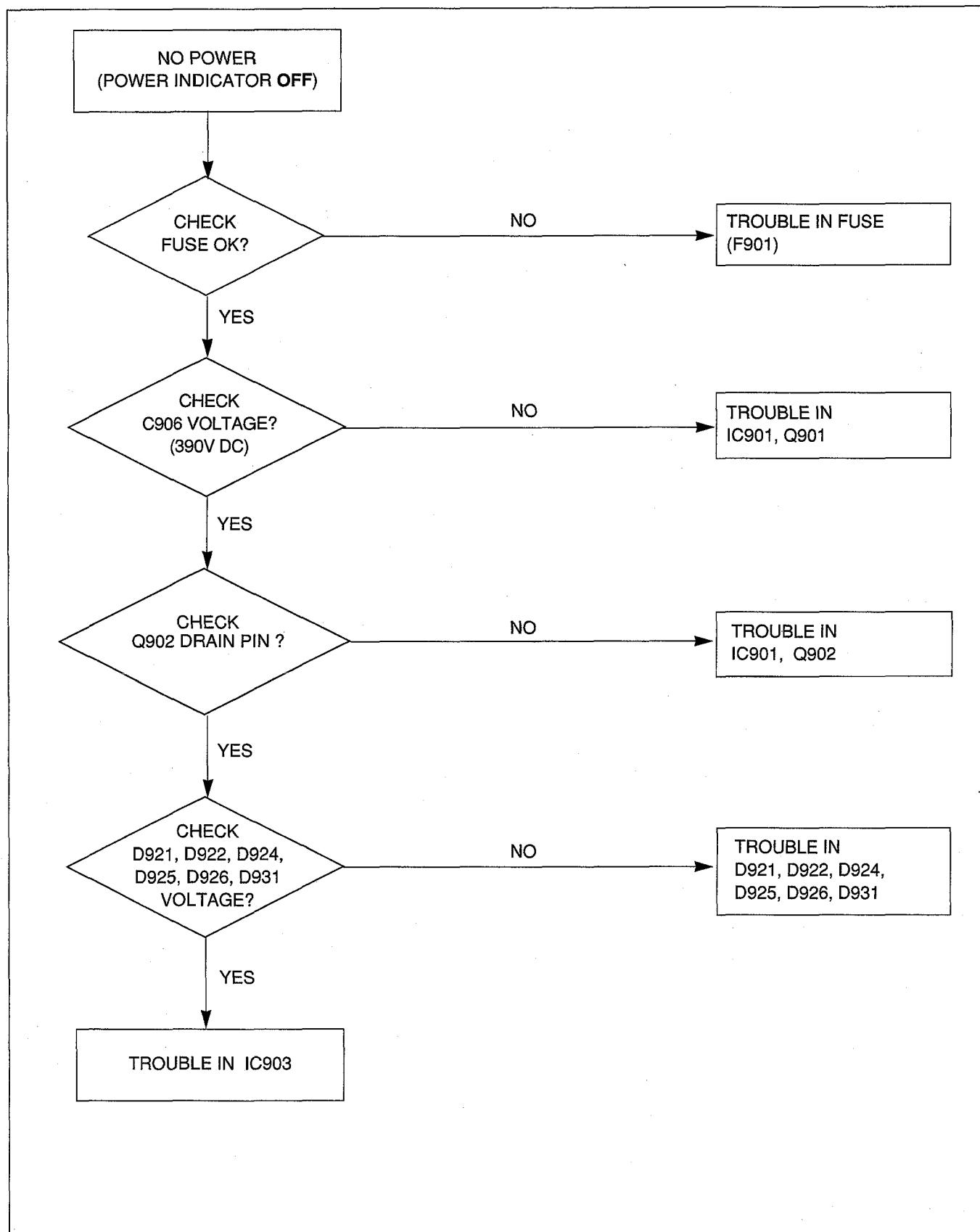


## 8. INTERFACE BOARD (Parts Side)

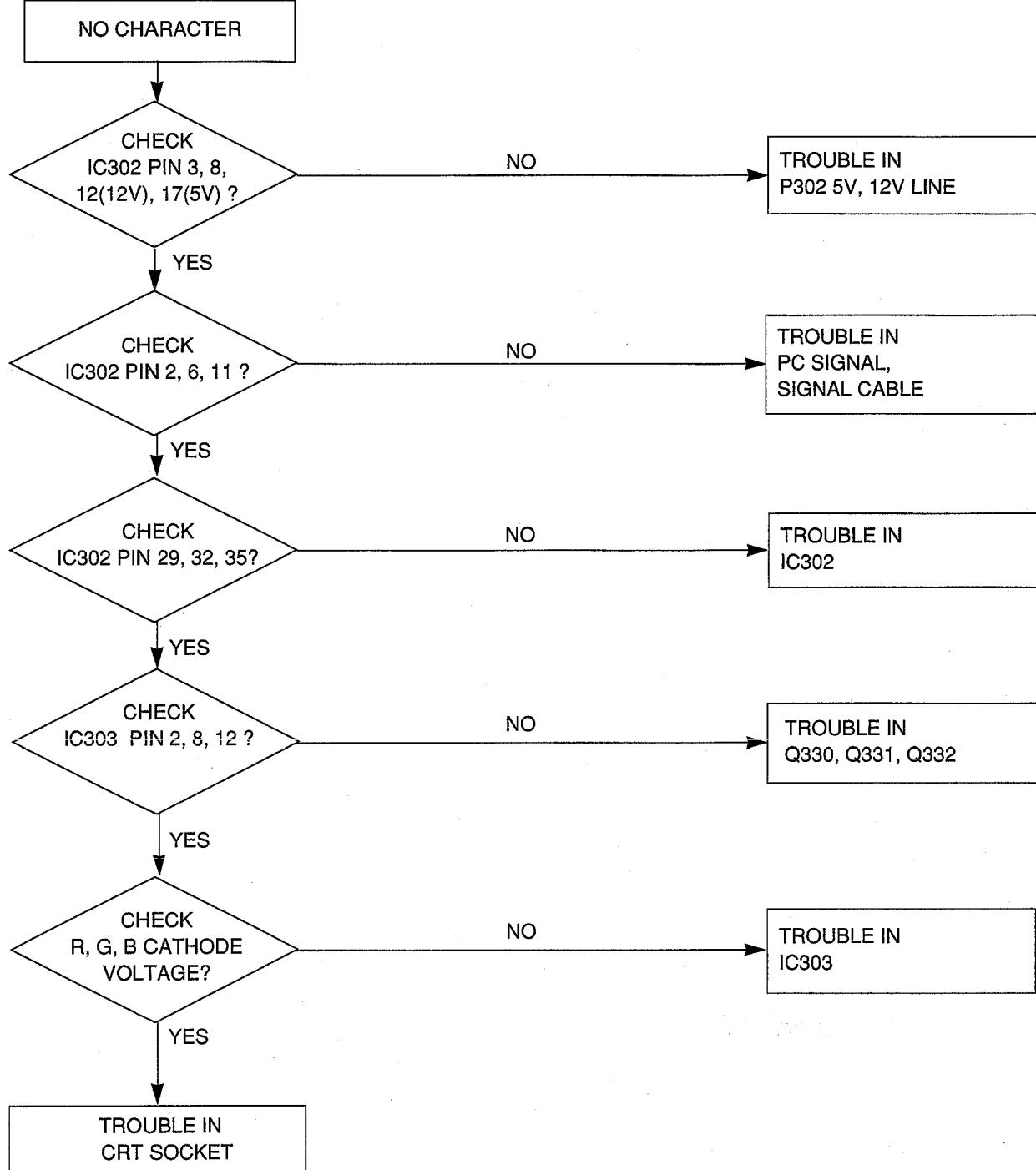


# TROUBLESHOOTING GUIDE

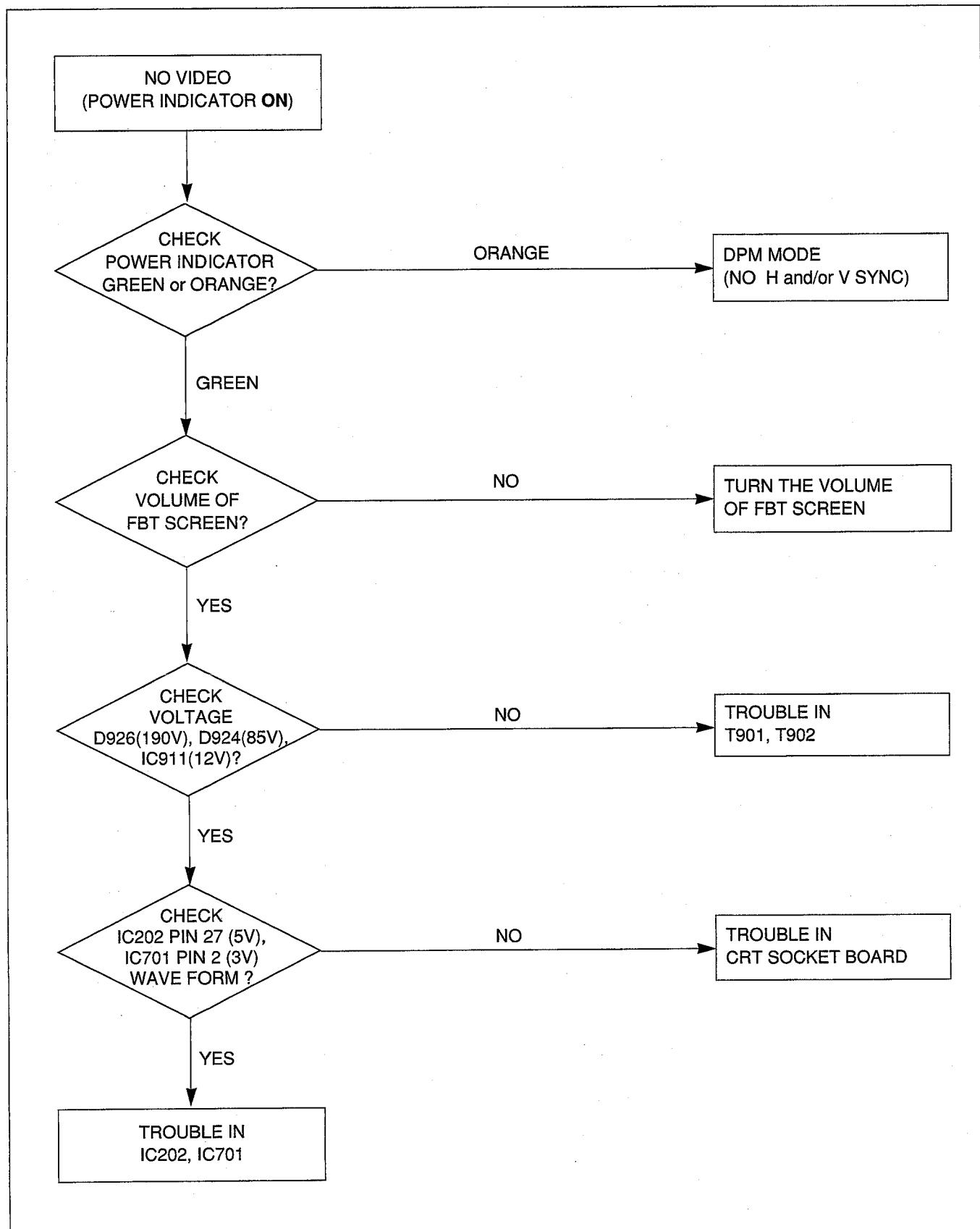
## 1. NO POWER



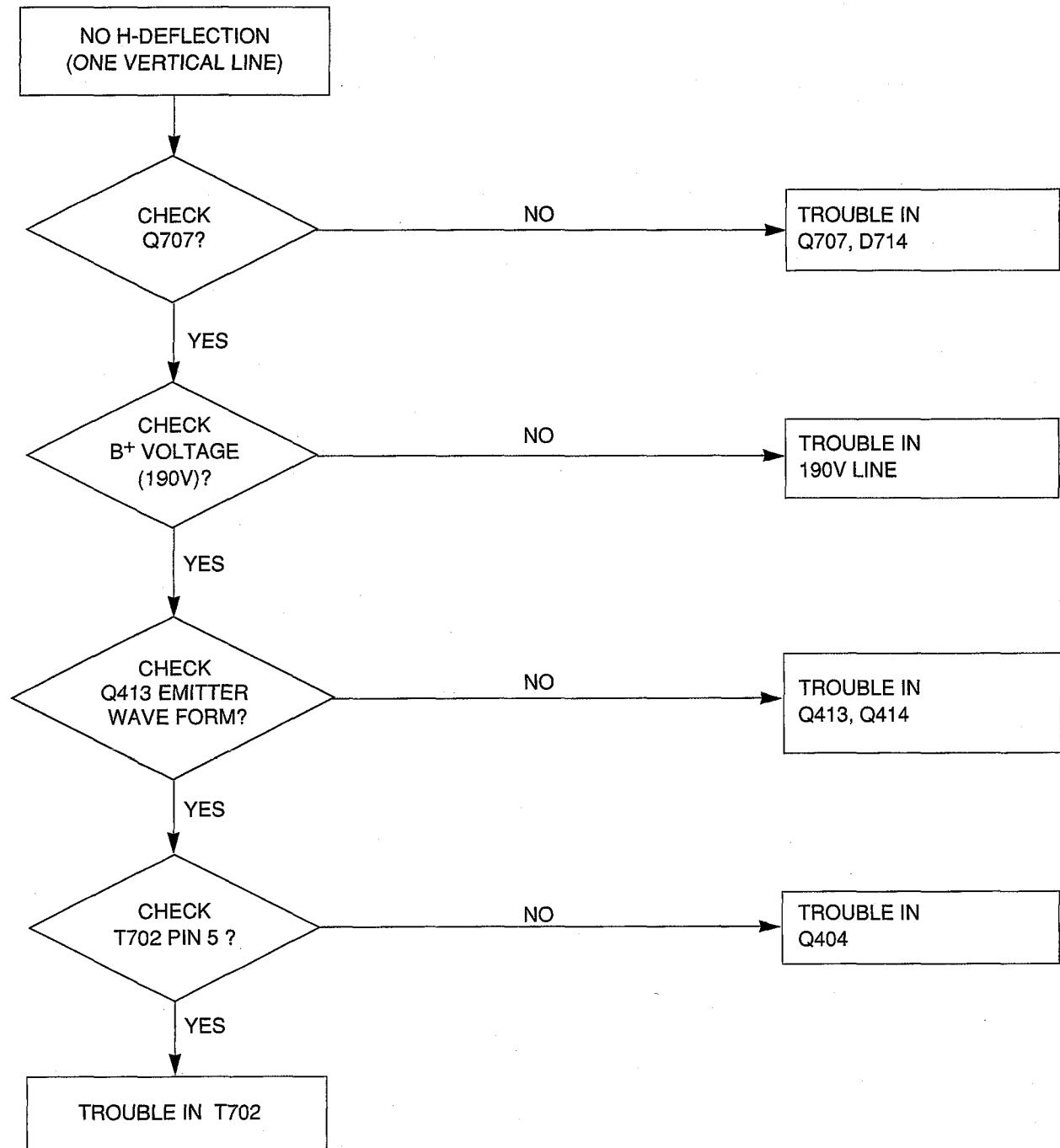
## 2. NO CHARACTER



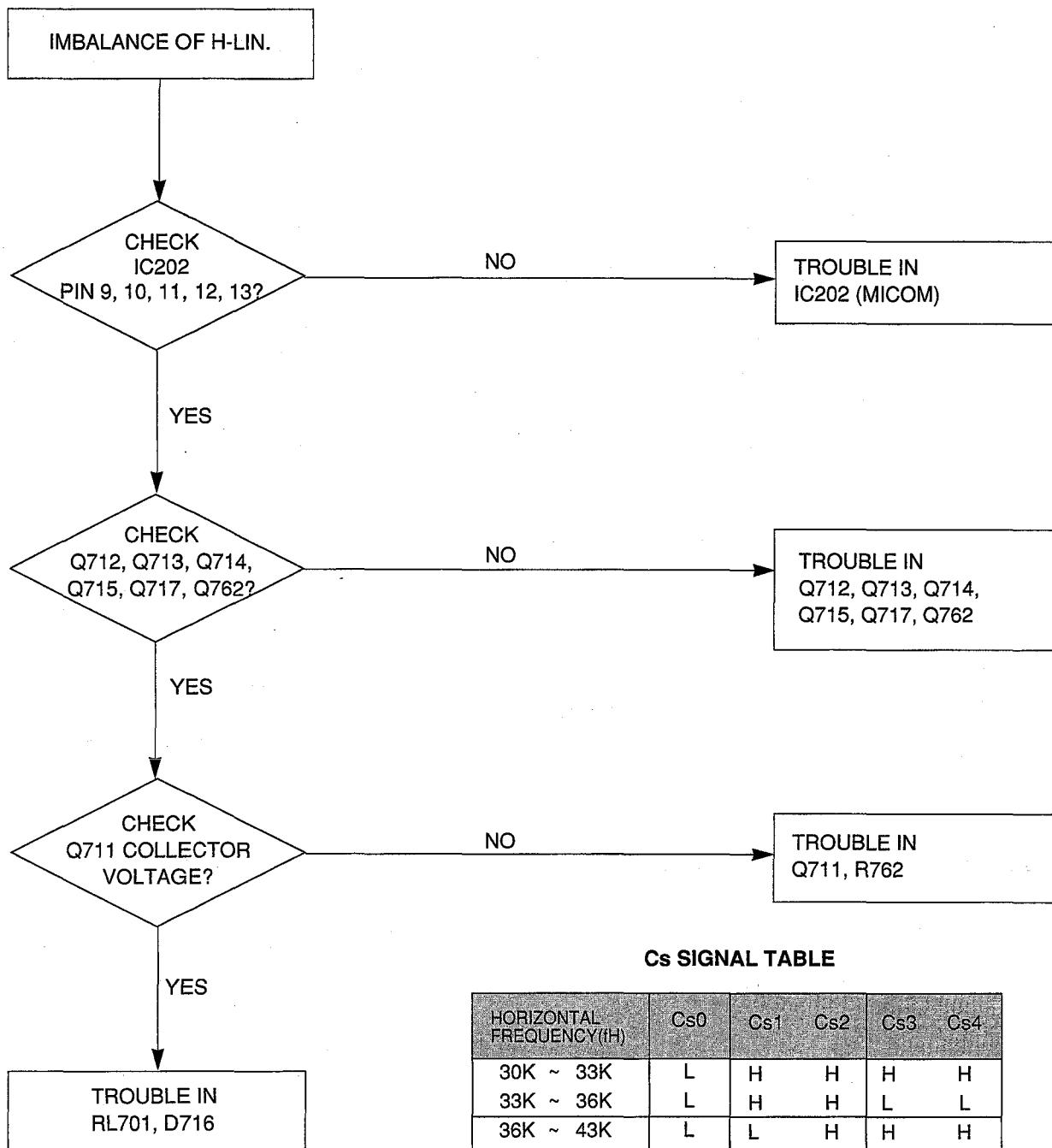
### 3. NO RASTER



#### 4. NO HORIZONTAL DEFLECTION



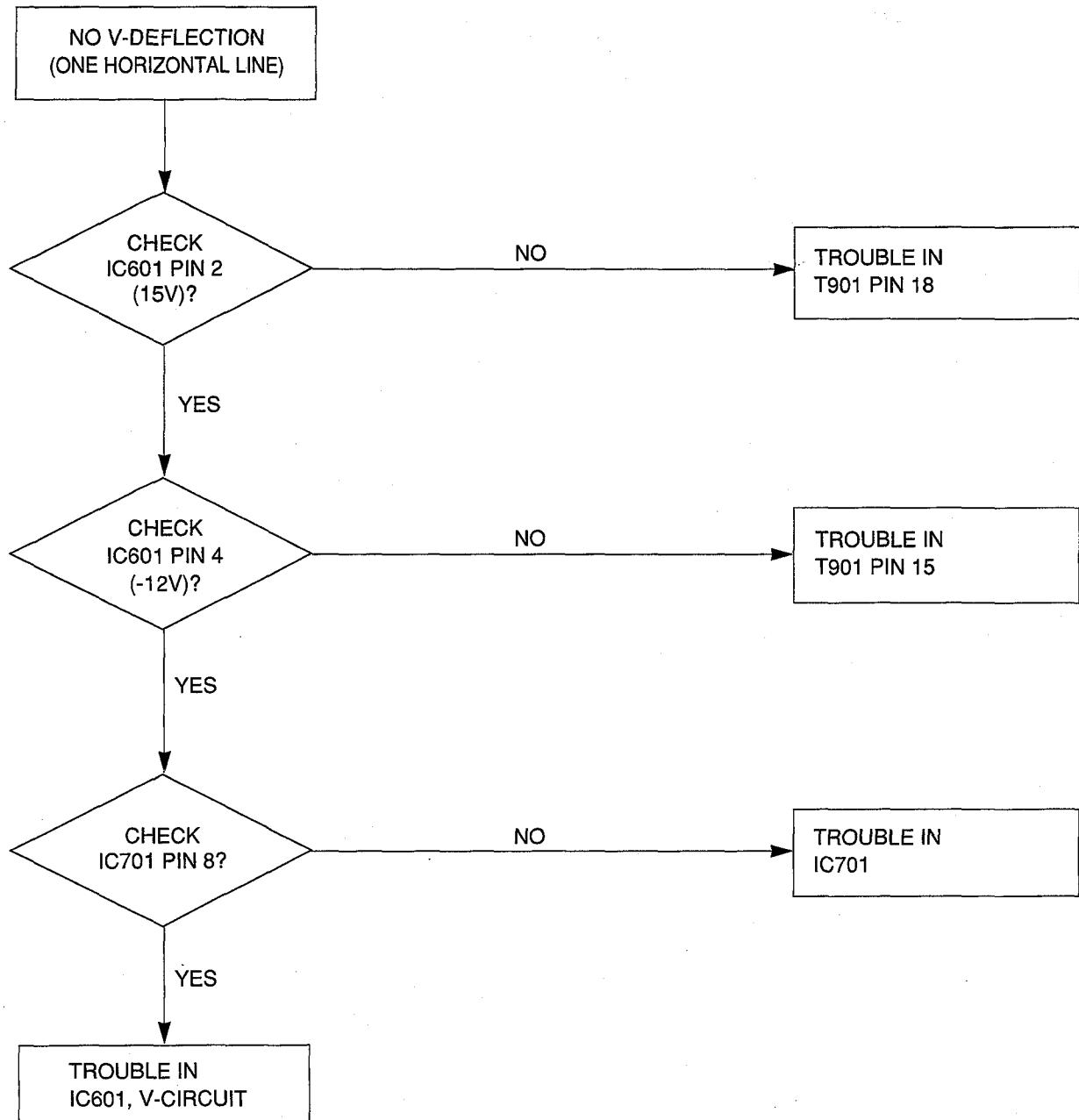
## 5. TROUBLE IN H-LINEARITY



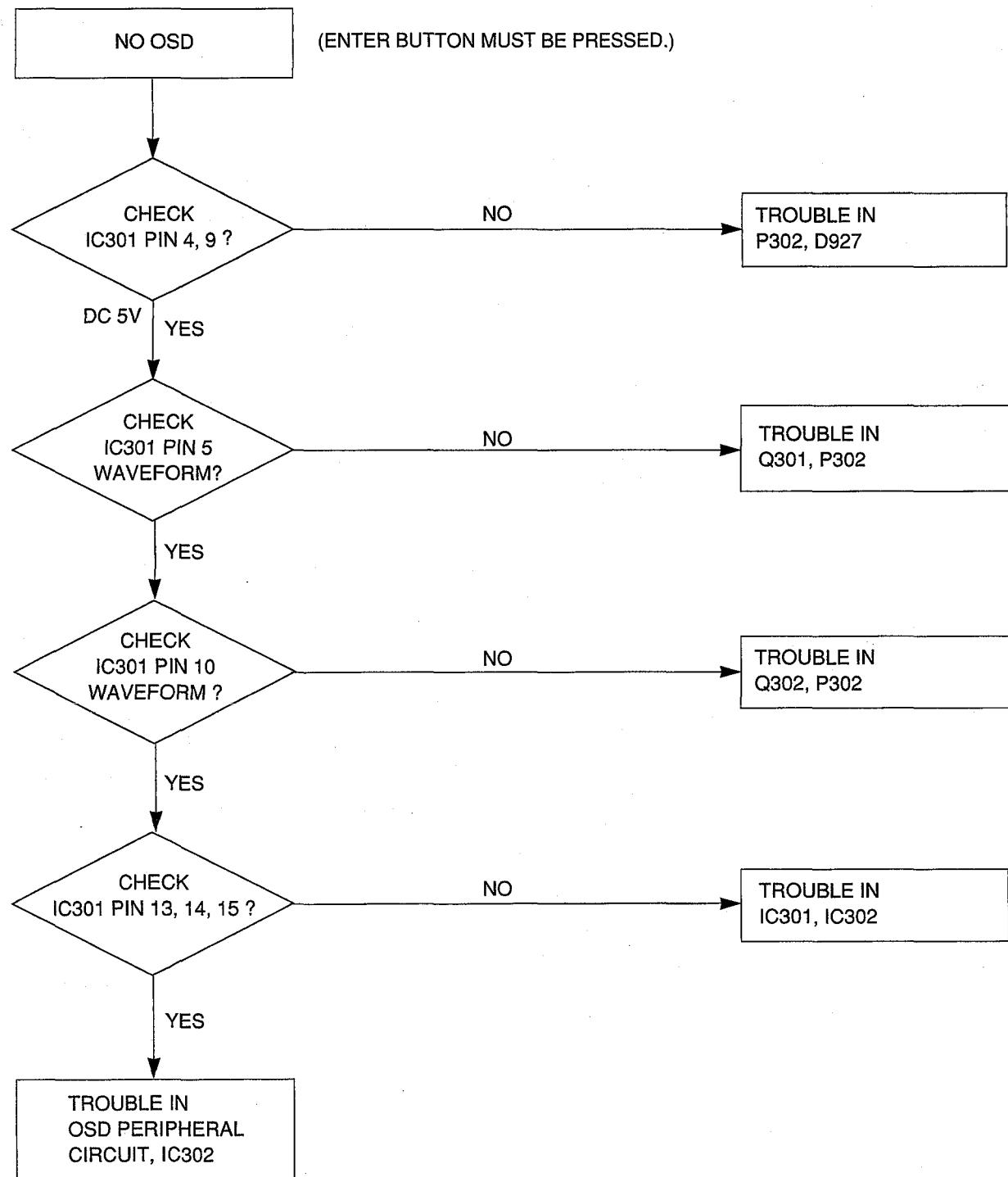
Cs SIGNAL TABLE

HORIZONTAL FREQUENCY(fH)	Cs0	Cs1	Cs2	Cs3	Cs4
30K ~ 33K	L	H	H	H	H
33K ~ 36K	L	H	H	L	L
36K ~ 43K	L	L	H	H	H
43K ~ 47K	L	L	H	L	H
47K ~ 49K	L	L	H	L	L
49K ~ 57K	H	L	H	H	H
57K ~ 63K	H	L	L	H	H
63K ~ 73K	H	L	L	H	L
73K ~ 81K	H	L	L	L	H
81K ~ 92K	H	L	L	L	L
92K ~	H	L	L	L	L

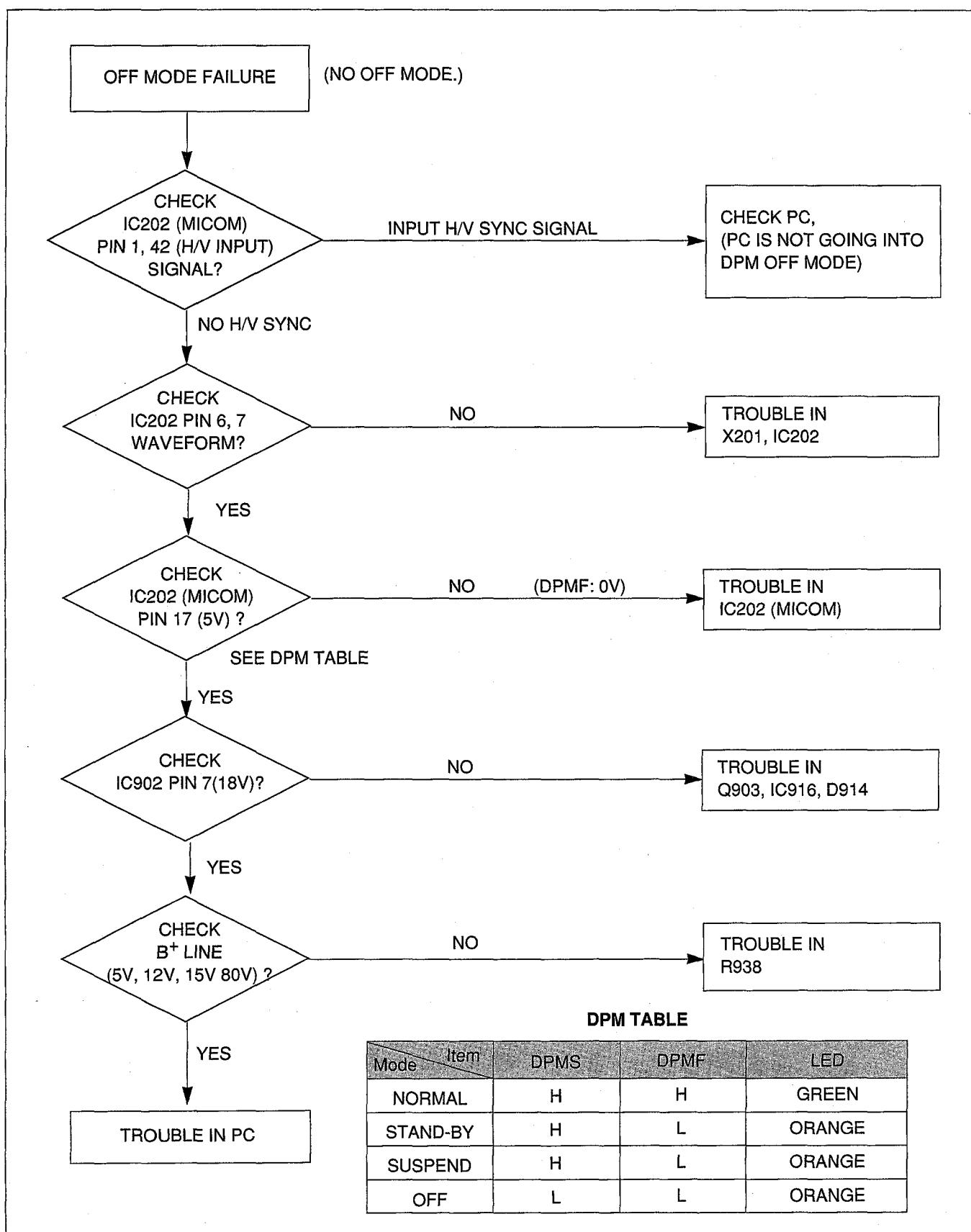
## 6. NO VERTICAL DEFLECTION



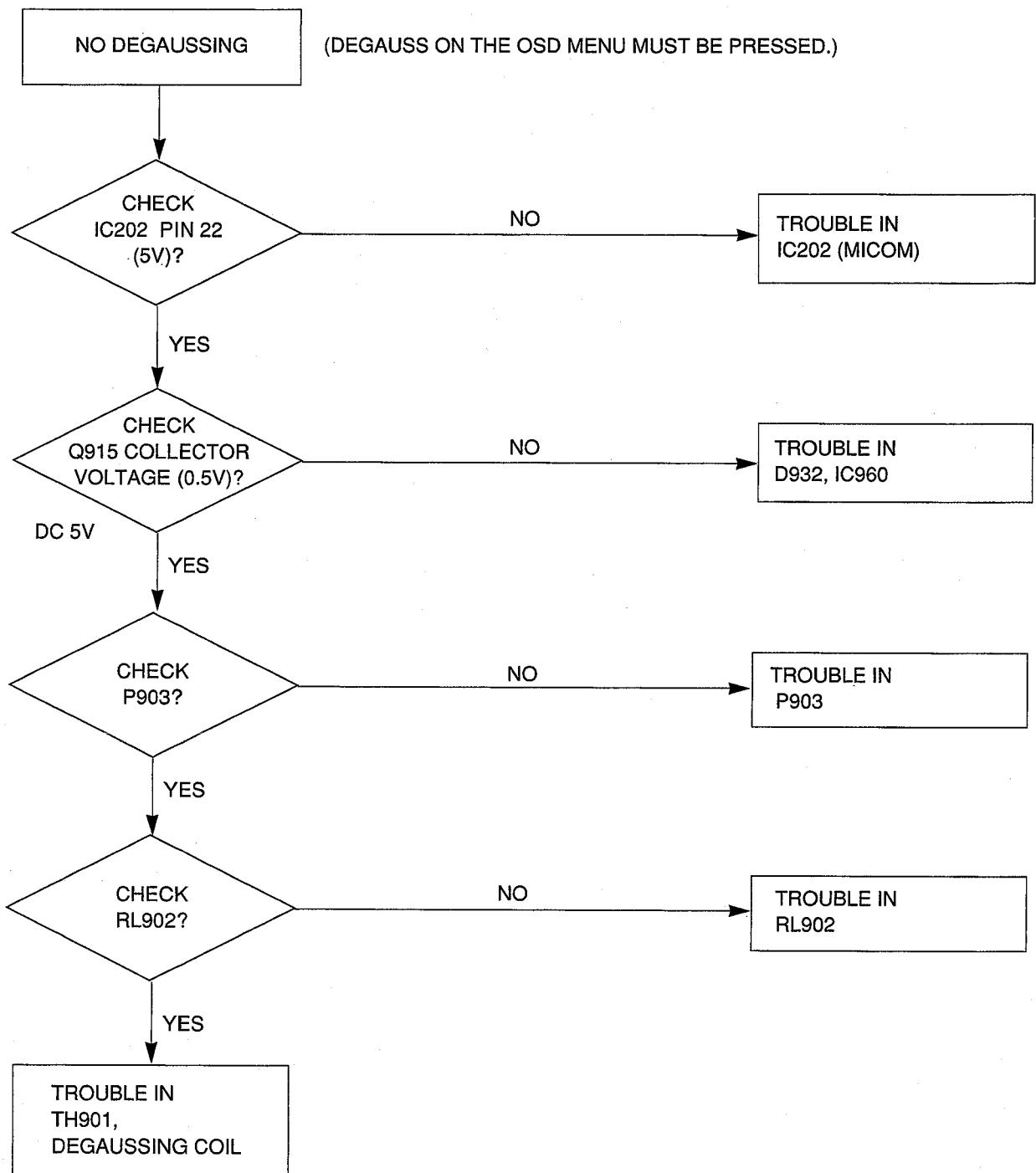
## 7. TROUBLE IN OSD



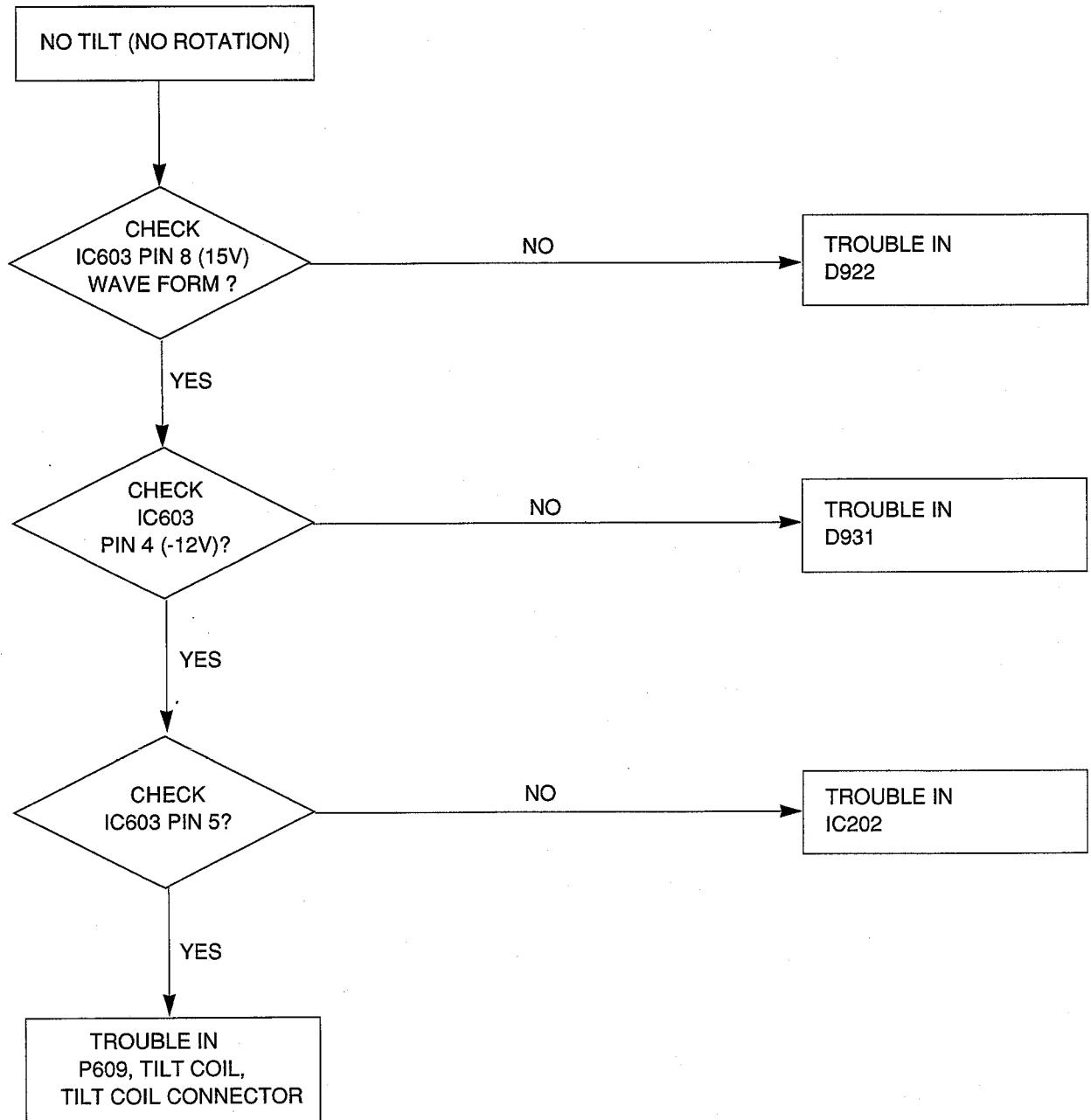
## 8. TROUBLE IN DPM



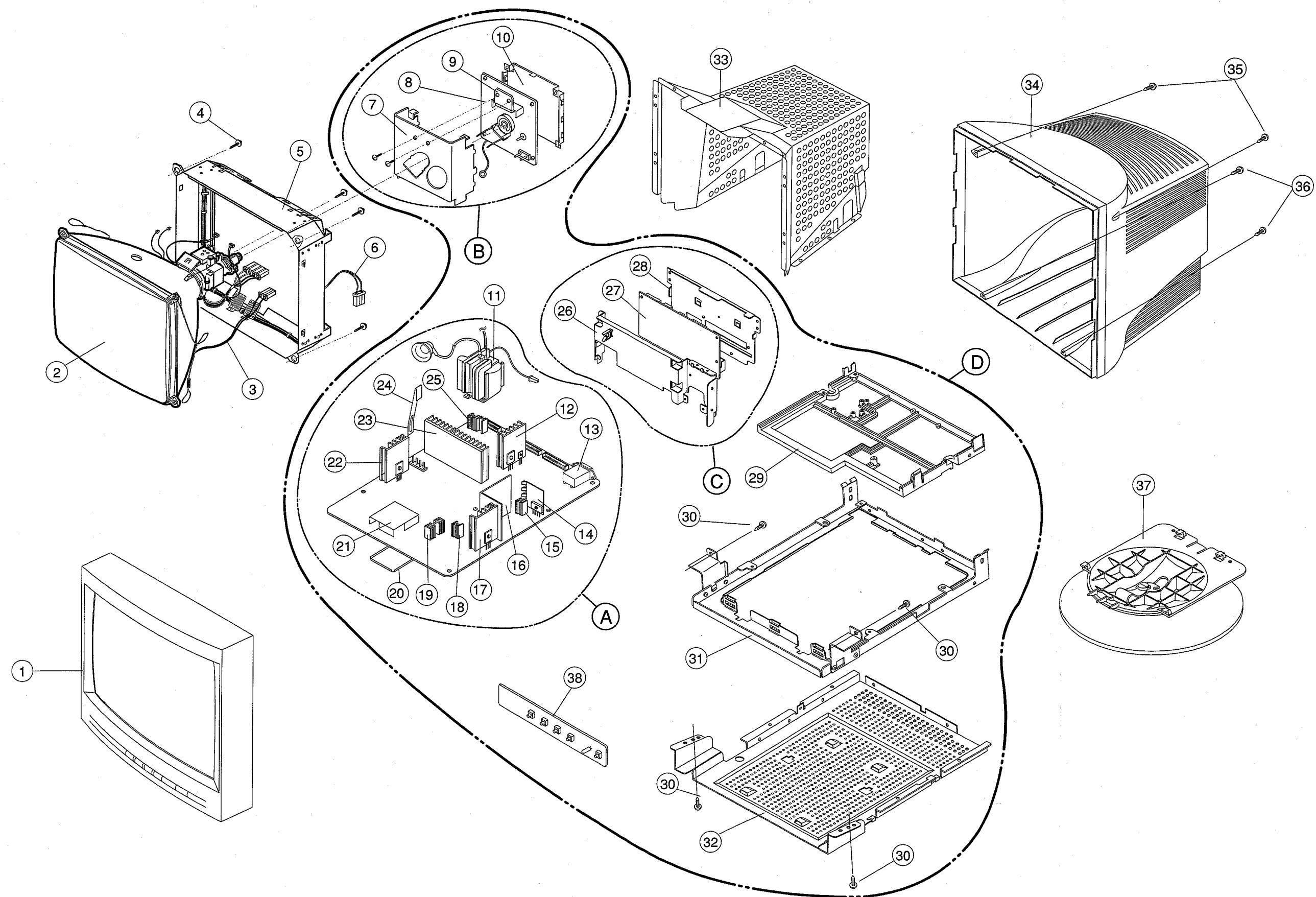
## 9. NO DEGAUSSING



## 10. NO TILT (NO ROTATION)



## EXPLODED VIEW



## EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Material
1	3091TKC033A	CABINET ASS'Y	1	LGC GN5001TF UL94-5V
	3091TKC033B	CABINET ASS'Y, BLACK		
2	2423GG2B91D	CDT, M46QCG913X02N6HD	1	
3	6868T19001A	CDT EARTH	1	
4	339-002D	SCREW, PHP+5x30+GW18	4	
5	4951TKS031D	METAL FRAME ASS'Y	1	
6	6140TC4001F	DEGAUSSING COIL	1	
7	4814TKV007A	SHIELD, VIDEO FRONT	1	AL
8	6871TVH102A	VIDEO PCB ASS'Y	1	
9	4920TKC021A	PLATE, HEAT SINK FOR IC303	1	AL
10	4814TKV008A	SHIELD, VIDEO REAR	1	SPTE-C (t=0.3)
11	6174Z-1018A	FBT, FMMTC61	1	
12	407-T98P	COMPRESS, HEAT SINK FOR Q503, Q507	2	AL (L=60)
13	381-228E	AC SOCKET	1	
14	407-937C	PLATE, HEAT SINK FOR D901	1	TERNE SHEET
15	407-T68B	COMPRESS, HEAT SINK FOR IC903	1	AL (L=20)
16	4920TKP026B	PLATE, HEAT SINK FOR Q901, D902	1	AL
17	4920TKC016B	COMPRESS, HEAT SINK FOR Q902	1	AL (L=70)
18	407-T68D	COMPRESS, HEAT SINK FOR D922	1	AL (L=24)
19	407-S29B	COMPRESS, HEAT SINK FOR IC911	1	AL
20	4814TKK052A	IC SHIELD, BOTTOM	1	SPTE-C (t=0.3)
21	4814TKK051A	IC SHIELD, TOP	1	SPTE-C (t=0.3)
22	4920TKC016C	PLATE, HEAT SINK FOR IC601	1	AL (L=65)
23	4920TKC003C	PLATE, HEAT SINK FOR D714, Q404, Q707	1	AL (120x80)
24	4950TKK117A	METAL FIX HEAT SINK	1	
25	407-T68H	PLATE, HEAT SINK FOR Q515, Q516	2	AL (L=24)
26	4814TKK082A	FRONT SHIELD, INTERFACE BOARD	1	SBHGI-A (t=0.8)
27	6871TKH005A	PCB ASS'Y, INTERFACE	1	
28	4814TKK083A	REAR SHIELD, INTERFACE BOARD	1	AL (t=1.2)
29	4810TKM027B	MAIN BRACKET	1	LGC GN5001TF UL94-5V
30	332-105F	SCREW, PVS+4x10	4	
31	4950TKS087A	METAL, MAIN FRAME	1	
32	4951TKK015A	METAL, BOTTOM SHIELD ASS'Y	1	
33	4815TKT007A	TOP SHIELD ASS'Y	1	SPTE-C (t=0.5)
34	3809TKC018A	BACK COVER ASS'Y	1	LGC GN5001TF UL94-5V
	3809TKC018B	BACK COVER ASS'Y, BLACK		
35	332-105F	SCREW, PVS+4x10	2	
36	332-102J	SCREW, PTP+4x20	2	
37	3043TKK045A	TIKT SWIVEL ASS'Y	1	LGC HIPS 60HR UL94-HB
	3043TKK045B	TIKT SWIVEL ASS'Y, BLACK		LGC ABS HF350
38	3141TZZ037A	PCB ASS'Y, CONTROL BOARD	1	
A	6871TMT109A	PCB ASS'Y, MAIN BOARD TOTAL	1	
B	6871TVT104A	PCB ASS'Y, VIDEO BOARD TOTAL	1	
C	6871TKT005A	PCB ASS'Y, INTERFACE BOARD TOTAL	1	
D	3313T19006A	MAIN CHASSIS ASS'Y TOTAL	1	

## REPLACEMENT PARTS LIST

**CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,  
READ CAREFULLY THE SAFETY PRECAUTIONS IN THIS MANUAL.**  
\* NOTE : S SAFETY Mark ▲  
AL ALTERNATIVE PARTS

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999-2-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
<b>MAIN BOARD</b>					
<b>CAPACITORs</b>					
		C401	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C402	181-310B	CAPACITOR, AL.ELECTROLYTIC, 3.3UF SM-BP(D) 5*11 50V M	
		C407	181-304W	CAPACITOR, POLYPROPYLENE, 473J 20.0*16.0*10.0 400V	
		C411	0CE476ER618	CAPACITOR, AL.ELECTROLYTIC, 47UF KMG 250V M FL TP 5	
		C421	0CE6856K618	CAPACITOR, AL.ELECTROLYTIC, 6.8 UF SMS,SG 50V M FL	
		C422	0CK1020K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 1000PF 50V K B	
		C423	0CN1010K519	CAPACITOR, TUBULAR(HIGH DIELEC), 100P 50V K B TA52	
		C424	181-288D	CAPACITOR, POLYESTER, MKT 100V 473JTR PHS26473	
		C426	0CK1020K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 1000PF 50V K B	
		C427	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C428	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C429	0CN1020K519	CAPACITOR, TUBULAR(HIGH DIELEC), 1000P 50V K B TA52	
		C431	0CE3376H618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 25V M FL TP(5),	
		C432	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C433	0CN1210K519	CAPACITOR, TUBULAR(HIGH DIELEC), 120P 50V K B TA52	
		C434	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C435	181-475A	CAPACITOR, POLYPROPYLENE, 102J 11.5*10.0*6.0*5.0 100V	
		C436	0CN5610K519	CAPACITOR, TUBULAR(HIGH DIELEC), 560P 50V K B TA52	
		C437	0CE3376H618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 25V M FL TP(5)	
		C501	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C502	0CN1020K519	CAPACITOR, TUBULAR(HIGH DIELEC), 1000P 50V K B TA52	
		C503	0CQ1021N419	CAPACITOR, POLYESTER, 1000P 100V J POLY NI TP	
		C504	0CE1056K618	CAPACITOR, AL.ELECTROLYTIC, 1.0U SMS 50V M FM5 TP5	
	▲	C505	0CE4766K618	CAPACITOR, AL.ELECTROLYTIC, 47M SMS 50V M FM5 TP(5)	
	▲	C506	0CN5610K519	CAPACITOR, TUBULAR(HIGH DIELEC), 560P 50V K B TA52	
		C507	0CC5600K415	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 56P 50V	
		C508	0CN4710K519	CAPACITOR, TUBULAR(HIGH DIELEC), 470P 50V K B TA52	
		C509	0CN2710K519	CAPACITOR, TUBULAR(HIGH DIELEC), 270P 50V K B TA52	
		C511	181-288J	CAPACITOR, POLYESTER, MKT 100V 563JTR PHS26563	
		C512	0CE2266K618	CAPACITOR, AL.ELECTROLYTIC, 22M SMS 50V M FM5 TP(5)	
		C513	0CE4766K618	CAPACITOR, AL.ELECTROLYTIC, 47M SMS 50V M FM5 TP(5)	
		C514	0CK10302945	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 0.01UF 2KV Z F	
		C516	181-477W	CAPACITOR, POLYPROPYLENE, 473J 19.5*15.0*8.5*7.5 250V J	
		C518	0CN1030H949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.0100UF 25V Z F TA52	
		C521	181-482G	CAPACITOR, POLYPROPYLENE, 334J 18.0*18.0*11.0*7.5 250V	
		C522	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C523	0CN1010K519	CAPACITOR, TUBULAR(HIGH DIELEC), 100P 50V K B TA52	
		C524	181-288D	CAPACITOR, POLYESTER, MKT 100V 473JTR PHS26473	
		C525	181-309D	CAPACITOR, POLYPROPYLENE, 182J 23.0*15.0*8.5*15.0 1.6KV	

MODEL: VCDTS21466-1 VCDTS21466-2				DATE: 1999.2.11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C526	0CK10302945	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 0.01UF 2KV Z F	
		C527	0CE477CH618	CAPACITOR, AL.ELECTROLYTIC, 470UF SHL 25V M FL TP5	
		C528	0CE476ER618	CAPACITOR, AL.ELECTROLYTIC, 47UF KMG 250V M FL TP 5	
		C529	0CK22101515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 220P 1KV K B TP5	
		C533	0CE226CP618	CAPACITOR, AL.ELECTROLYTIC, 22U SHL 160V M FL TP5	
		C534	0CE3366N618	CAPACITOR, AL.ELECTROLYTIC, 33U SMS 100V M FM5 TP5	
		C535	0CE4756K618	CAPACITOR, AL.ELECTROLYTIC, 4.7U SMS 50V M FM5 TP5	
		C536	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C537	0CE2266K618	CAPACITOR, AL.ELECTROLYTIC, 22M SMS 50V M FM5	
		C538	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5	
		C539	0CE6856K618	CAPACITOR, AL.ELECTROLYTIC, 6.8 UF SMS,SG 50V M FL	
		C541	0CE2266K618	CAPACITOR, AL.ELECTROLYTIC, 22M SMS 50V M FM5	
		C542	0CC0400W115	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 4PF 500V	
		C601	0CE3376H618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 25V M FL TP(5)	
		C602	181-288M	CAPACITOR, POLYESTER, MKT 63V 105KTR PHS15105	
		C603	0CE227CK618	CAPACITOR, AL.ELECTROLYTIC, 220U SHL 50V M FL TP5	
		C604	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5	
		C605	0CE1056K618	CAPACITOR, AL.ELECTROLYTIC, 1.0U SMS 50V M FM5 TP5	
		C606	0CK3320K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 3300P 50V	
		C607	181-288N	CAPACITOR, POLYESTER, MKT 100V 103JTR PHS86103	
		C608	0CC2710K405	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 270P 50V	
		C609	181-288P	CAPACITOR, POLYESTER, MKT 100V 153JTR PHS86153	
		C611	0CE3376H618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 25V M FL TP(5)	
		C613	181-288C	CAPACITOR, POLYESTER, MKT 100V 224JTR PHS 26224	
		C614	0CE2256K618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 50V M FM5	
		C615	0CQ2721N419	CAPACITOR, POLYESTER, 2700PF 100V J PE NI TP	
		C617	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C631	181-288E	CAPACITOR, POLYESTER, MKT 100V 474JTR PHS 26474	
		C633	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C635	0CE1076K618	CAPACITOR, AL.ELECTROLYTIC, 100U SMS 50V M FM5 TP5	
		C701	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C702	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C703	181-288H	CAPACITOR, POLYESTER, MKT 100V 333JTR PHS 86333	
		C704	0CZ2TFT002K	CAPACITOR, ECQV1H684JZ3 684J 50V TP5.0 MATSUSHITA	
		C705	0CK1040K945	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 0.1UF 50V Z F TR	
		C706	0CZ2TFT001Z	CAPACITOR, ECQB1H104JM3 104J 50V TP5.0 MATSUSHITA	
		C707	0CN1810K519	CAPACITOR, TUBULAR(HIGH DIELEC), 180P 50V K B TA52	
		C709	181-288H	CAPACITOR, POLYESTER, MKT 100V 333JTR PHS 86333	
		C711	0CC0400K115	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 4P 50V	
		C712	0CQ2231N419	CAPACITOR, POLYESTER, 0.022UF 100V J PE NI TP	
		C713	0CE4776F618	CAPACITOR, AL.ELECTROLYTIC, 470U SMS 16V M FM5 TP5	
		C714	0CE2276F618	CAPACITOR, AL.ELECTROLYTIC, 220UF SMS 16V M FL TP5	
		C715	0CBZTTA001S	CAPACITOR, POLYPROPYLENE, 123J 23.0*16.0*9.5*7.5 800V	
		C716	0CQ6821N419	CAPACITOR, POLYESTER, 6800PF 100V J PE NI TP	
		C717	0CE3366F618	CAPACITOR, AL.ELECTROLYTIC, 33U SMS 16V M FM5 TP5	
		C718	0CQ2231N419	CAPACITOR, POLYESTER, 0.022UF 100V J PE NI TP	
		C721	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5 TP(5)	
		C722	0CE4776F618	CAPACITOR, AL.ELECTROLYTIC, 470U SMS 16V M FM5 TP5	
		C724	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5 TP(5)	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999.2.11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C725	0CE2256K618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 50V M FM5 TP5	
		C726	0CQ1021N419	CAPACITOR, POLYESTER, 1000P 100V J POLY NI TP	
		C727	0CE2256K618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 50V M FM5 TP5	
		C732	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C733	0CN1020K519	CAPACITOR, TUBULAR(HIGH DIELEC), 1000P 50V K B TA52	
		C734	0CN2210K519	CAPACITOR, TUBULAR(HIGH DIELEC), 220P 50V K B TA52	
		C741	0CE3366K618	CAPACITOR, AL.ELECTROLYTIC, 33M SMS 50V M FM(5) TP(5)	
		C742	0CE227CK618	CAPACITOR, AL.ELECTROLYTIC, 220U SHL 50V M FL TP5	
		C743	0CE1076K618	CAPACITOR, AL.ELECTROLYTIC, 100U SMS 50V M FM5 TP5	
		C744	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5	
		C745	0CE4756K618	CAPACITOR, AL.ELECTROLYTIC, 4.7U SMS 50V M FM5 TP5	
		C746	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C748	0CK1020K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 1000PF 50V K B	
		C753	0CBZTBU004A	CAPACITOR, POLYPROPYLENE, 392J 29.0*19.5*8.5*20.0 2.5KV	
		C754	181-288T	CAPACITOR, POLYESTER, MKT 100V 223KTR PHS85223	
		C755	0CK8210W515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 820P 500V K B TS	
		C756	181-305L	CAPACITOR, POLYPROPYLENE, 684J 26.0*19.0*12.5*15.0 250V	
		C757	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C760	181-478A	CAPACITOR, POLYPROPYLENE, 104J 20.0*18.5*10.5*7.5 250V	
		C761	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C762	181-478A	CAPACITOR, POLYPROPYLENE, 104J 20.0*18.5*10.5*7.5 250V	
		C763	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C764	181-305M	CAPACITOR, POLYPROPYLENE, 824J 26.0*21.5*13.0*15.0 250V	
		C765	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C766	181-478A	CAPACITOR, POLYPROPYLENE, 104J 20.0*18.5*10.5*7.5 250V	
		C767	181-288M	CAPACITOR, POLYESTER, MKT 63V 105KTR PHS15105	
		C769	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C771	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C772	181-482U	CAPACITOR, POLYPROPYLENE, 254JF 19.0*17.0*10.0*7.5 250V	
		C774	181-477X	CAPACITOR, POLYPROPYLENE, 563J 19.5*15.5*9.0*7.5 250V	
		C775	0CE475BR618	CAPACITOR, AL.ELECTROLYTIC, 4.7000UF KME 250V M FL	
		C776	0CK10102515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 100PF 2KV K B TR	
		C777	0CK1020W515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 1000P 500V K B	
		C779	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C781	0CK10102515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 100PF 2KV K B TR	
		C790	0CK68101515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 680P 1KV K B TS	
		C901	0CBZTBU002B	CAPACITOR, POLYESTER, BULK PCX2 335 474K	
		C904	0CBZTBU002B	CAPACITOR, POLYESTER, BULK PCX2 335 474K	
		C905	0CBZTBU002B	CAPACITOR, POLYESTER, BULK PCX2 335 474K	
		C906	181-296M	CAPACITOR, AL.ELECTROLYTIC, 150UF KMH(22*45) 450V M	
		C907	0CK68101515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 680P 1KV K B TS	
		C910	0CKZTTA003C	CAPACITOR, CERAMIC (HIGH DIELECTRIC), SC E 472M	
		C911	0CC6800K415	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 68P 50V	
		C912	0CC6810K405	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 680PF 50V J	
		C913	181-288M	CAPACITOR, POLYESTER, MKT 63V 105KTR PHS15105	
		C914	181-304V	CAPACITOR, POLYPROPYLENE, 393J 19.5*15.5*9.5*10.0 400V	
		C915	0CKZTTA002A	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 220PF K 1KV R	
		C916	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C918	0CN1020K519	CAPACITOR, TUBULAR(HIGH DIELEC), 1000P 50V K B TA52	

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C921	OCN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C922	0CE1076H618	CAPACITOR, AL.ELECTROLYTIC, 100M SMS 25V M FM5	
		C923	OCN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C924	0CQ8221N519	CAPACITOR, POLYESTER, 0.0082U 100V K POLY NI TP	
		C925	0CQ1021N419	CAPACITOR, POLYESTER, 1000P 100V J POLY NI TP	
		C926	181-288N	CAPACITOR, POLYESTER, MKT 100V 103JTR PHS86103	
		C927	0CE227CK618	CAPACITOR, AL.ELECTROLYTIC, 220U SHL 50V M FL TP5	
		C928	0CE3376H618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 25V M FL TP(5)	
		C929	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5 TP(5)	
		C930	0CKZTTA003C	CAPACITOR, CERAMIC (HIGH DIELECTRIC), SC E 472M	
		C932	OCN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C933	0CE4766F618	CAPACITOR, AL.ELECTROLYTIC, 47U SMS 16V M FM5	
		C937	0CQ1021N419	CAPACITOR, POLYESTER, 1000P 100V J POLY NI TP	
		C941	0CE108CH618	CAPACITOR, AL.ELECTROLYTIC, 1000UF SHL 25V M FL TP5	
		C942	0CE3386H650	CAPACITOR, AL.ELECTROLYTIC, 3300M SMS 25V M FM7.5	
		C943	0CE3376F618	CAPACITOR, AL.ELECTROLYTIC, 330M SMS 16V M FM5 TP5	
		C944	0CE228CF618	CAPACITOR, AL.ELECTROLYTIC, 2200U SHL 16V M FL TP5	
		C945	0CE477EK618	CAPACITOR, AL.ELECTROLYTIC, 470UF KMG 50V M FL TP 5	
		C946	0CE1076K618	CAPACITOR, AL.ELECTROLYTIC, 100U SMS 50V M FM5 TP5	
		C947	0CZ2TFT001Z	CAPACITOR, ECQB1H104JM3 104J 50V TP5.0 MATSUSHITA	
		C950	0CE2276N618	CAPACITOR, AL.ELECTROLYTIC, 220UF SMS 100V M FL	
		C951	0CE227CR650	CAPACITOR, AL.ELECTROLYTIC, 220UF SHL 250V M FM7.5	
		C952	0CK4710K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 470PF 50V K B TR	
		C953	0CE108BF618	CAPACITOR, AL.ELECTROLYTIC, 1000UF KME 16V M FL TP5	
		C954	0CE108CD618	CAPACITOR, AL.ELECTROLYTIC, 1000UF SHL 10V M FL TP5	
		C955	OCN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C956	0CE477CH618	CAPACITOR, AL.ELECTROLYTIC, 470UF SHL 25V M FL TP5	
		C957	0CZ2TFT001Z	CAPACITOR, ECQB1H104JM3 104J 50V TP5.0 MATSUSHITA	
		C958	0CK2220K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 2200P 50V K B	
		C959	0CE4766F618	CAPACITOR, AL.ELECTROLYTIC, 47U SMS 16V M FM5 TP5	
		C963	0CE4766F618	CAPACITOR, AL.ELECTROLYTIC, 47U SMS 16V M FM5 TP5	
		C969	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5 TP(5)	
		C973	0CE2256K618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 50V M FM5 TP5	
		C981	OCN1010K519	CAPACITOR, TUBULAR(HIGH DIELEC), 100P 50V K B TA52	
		C985	0CE2266N618	CAPACITOR, AL.ELECTROLYTIC, 22M SMS 100V M FM5 TP5	
DIODEs					
		D401	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D402	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D404	0DZ180009AG	DIODE, ZENER, MTZJ18B TP ROHM-K DO34 500MW 18V 5MA	
		D405	0DR210009AB	DIODE, RECTIFIER, RL2AV(1) TP SANKEN A-TMD 600V 1.1A	
		D412	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D414	0DZ910009AH	DIODE, ZENER, MTZJ9.1B TP ROHM-K DO34 500MW 9.1V 5MA	
		D415	0DZ510009AB	DIODE, ZENER, MTZ5.1B TP ROHM-K DO34 500MW 5.1V 20MA	
		D423	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D501	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D502	0DZ180009AG	DIODE, ZENER, MTZJ18B TP ROHM-K DO34 500MW 18V 5MA	
		D503	0DR210009AB	DIODE, RECTIFIER, RL2AV(1) TP SANKEN A-TMD 600V 1.1A	
		D504	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		D505	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D506	0DD100009DK	DIODE, RECTIFIER, RU1P V(1) TP SANKEN R-TMD 1000V 0.4A	
		D507	0DD100009DK	DIODE, RECTIFIER, RU1P V(1) TP SANKEN R-TMD 1000V 0.4A	
		D513	0DD100009DD	DIODE, RECTIFIER, RGP10D TP G.I DO204AL 200V 1A 30A	
		D514	0DD100009DD	DIODE, RECTIFIER, RGP10D TP G.I DO204AL 200V 1A 30A	
		D515	0DZ270009AA	DIODE, ZENER, MTZ27D,TP(52MM),ROHM	
		D516	0DD100009DD	DIODE, RECTIFIER, RGP10D TP G.I DO204AL 200V 1A 30A	
		D521	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D528	0DZ750009AA	DIODE, ZENER, MTZ7.5B TP ROHM-K DO34 500MW 7.5V 20MA	
		D531	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D532	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D602	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D610	0DD100009DD	DIODE, RECTIFIER, RGP10D TP G.I DO204AL 200V 1A 30A	
		D617	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D701	0DZ750009AA	DIODE, ZENER, MTZ7.5B TP ROHM-K DO34 500MW 7.5V 20MA	
		D702	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D703	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D704	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D705	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D706	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D707	0DZ110009AD	DIODE, ZENER, MTZJ11B TP ROHM-K DO34 500MW 11V 5MA	
		D710	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D711	0DZ750009AA	DIODE, ZENER, MTZ7.5B TP ROHM-K DO34 500MW 7.5V 20MA	
		D713	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D714	0DD300000AC	DIODE, RECTIFIER, FMP-G3FS BK SANKEN TO220F 1500V 5A	
		D715	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D716	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D717	0DD220009AA	DIODE, RECTIFIER, RG2A2 TP SANKEN R-TMD 1300V 0.5A 5A	
		D718	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D719	0DD140009AA	DIODE, RECTIFIER, EK14 V(1) TP SANKEN E/EO-TMD 40V 1.5A	
		D720	0DD400509BB	DIODE, RECTIFIER, UF4005(52MM) TP G.I DO41 600V 1A 30A	
		D721	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D722	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D723	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D731	0DD400109DB	DIODE, SWITCHING, 1N4001 TP ROHM-K DO41 50V 1A 30A	
▲		D901	0DD406000AB	DIODE, BRIDGE, RBV406M FL-B BK SANKEN 600V 4A 120A	
		D902	0DR360000AB	DIODE, RECTIFIER, D3L60 BK SHINDENGEN ITO220 600V	
		D903	0DR210009AB	DIODE, RECTIFIER, RL2AV(1) TP SANKEN A-TMD 600V 1.1A	
		D904	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D905	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D906	0DD400709CB	DIODE, RECTIFIER, UF4007 TP G.I DO204AL 1000V 1A 30A	
		D909	0DD110009DB	DIODE, RECTIFIER, RM11CV(1) TP SANKEN R-TMD 1000V 1.2A	
		D911	0DZ240009CG	DIODE, ZENER, MTZJ24B TP ROHM-K DO34 500MW 24V 5MA	
		D912	0DD400509BB	DIODE, RECTIFIER, UF4005(52MM) TP G.I DO41 600V 1A 30A	
		D913	0DD400509BB	DIODE, RECTIFIER, UF4005(52MM) TP G.I DO41 600V 1A 30A	
		D914	0DD400509BB	DIODE, RECTIFIER, UF4005(52MM) TP G.I DO41 600V 1A 30A	
		D915	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D917	0DZ510009AB	DIODE, ZENER, MTZ5.1B TP ROHM-K DO34 500MW 5.1V 20MA	
		D918	0DZ620009AG	DIODE, ZENER, P6KE200 TP G.I D015 5W 200V 1MA 600W	

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		D919	0DZ620009AG	DIODE, ZENER, P6KE200 TP G.I D015 5W 200V 1MA 600W	
		D920	0DZ510009AB	DIODE, ZENER, MTZ5.1B TP ROHM-K DO34 500MW 5.1V 20MA	
		D921	0DD400509BB	DIODE, RECTIFIER, UF4005(52MM) TP G.I DO41 600V 1A 30A	
		D922	0DR520000AA	DIODE, RECTIFIER, D5LC20U BK SHINDENGEN ITO220 200V	
		D924	0DR210009AB	DIODE, RECTIFIER, RL2AV(1) TP SANKEN A-TMD 600V 1.1A	
		D925	0DR300140AA	DIODE, RECTIFIER, RL30A(LF014-302) BK SANKEN NON 600V	
		D926	0DR300140AA	DIODE, RECTIFIER, RL30A(LF014-302) BK SANKEN NON 600V	
		D927	0DR100009LA	DIODE, RECTIFIER, UG1D TP G.I DO204AL 200V 1A 40A	
		D931	0DD390009AA	DIODE, RECTIFIER, RK39V TP SANKEN R-TMD 90V 2A 50A	
		D932	0DD390009AA	DIODE, RECTIFIER, RK39V TP SANKEN R-TMD 90V 2A 50A	
		D936	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
ICs					
		IC401	0ISG082000B	IC, SGS-THOMSON, TL082ACN 8P,DIP BK DUAL J-FET OP-AMP	
		IC402	0ISS393000F	IC, SAMSUNG ELECTRONICS, KA393	
		IC501	0IMI625010A	IC, MITSUBISHI, M62501P 16P4 BK INTERFACE PWM IC	
		IC601	0ISG817200A	IC, SGS-THOMSON, TDA8172	
		IC603	0ISS455800H	IC, SAMSUNG ELECTRONICS, KA4558 8P DIP BK OP AMP	
		IC701	0INE188400B	IC, NEC, UPC1884ACT 30P,SDIP BK H/V PROCESSOR IC	
		IC702	0ISS358000C	IC, SAMSUNG ELECTRONICS, KA358 OP AMP	
		IC703	0IKE780500X	IC, KEC, KIA78L05BP TO-92L TP 5V REGULATOR	
▲		IC901	0IUN385300A	IC, UNITRODE, UC3853N 8P SDIP BK PFC PREREGULATOR	
▲		IC902	0ISS384300A	IC, SAMSUNG ELECTRONICS, KA3843B 8P SDIP BK PWM	
▲		IC903	0IPF223000A	IC, POWER INTEGRATION, TOP223Y-BE 3P,TO220 BK PWM	
		IC911	0IKE781200C	IC, KEC, KIA7812PI 3P(TO-220IS) 12V,1A	
▲		IC912	0ITO721400A	IC, TOSHIBA, TLP721[D4-GR] 4D PHOTO(SEMKO)	
		IC913	0ISS431000A	IC, SAMSUNG ELECTRONICS, KA431AZ (LM431AZ)	
▲		IC914	0ITO721400A	IC, TOSHIBA, TLP721[D4-GR] 4D PHOTO(SEMKO)	
		IC915	0ISS431000A	IC, SAMSUNG ELECTRONICS, KA431AZ (LM431AZ)	
▲		IC916	0ITO721400A	IC, TOSHIBA, TLP721[D4-GR] 4D PHOTO(SEMKO)	
		IC960	0ISH608300A	IC, SHARP, PQ6RD083 4P BK 6.3V VOL. REGULATOR	
COILs & COREs					
		L411	150-A39A	COIL, CHOKE, SPT0508A-270K1R3 (TDK),TP	
		L412	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L431	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L501	150-A39A	COIL, CHOKE, SPT0508A-270K1R3 (TDK),TP	
		L502	150-985U	COIL, CHOKE, DR15*25(C:8.5) 3.0MH 0.45MM 235.5T D/D	
		L503	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L516	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L517	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L601	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L602	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L603	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L701	OLA1000K119	INDUCTOR, AXIAL LEAD, 100UH K 2.3*3.4 TP	
		L702	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L704	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L705	150-L05N	COIL, LINEARITY, DR14*15 14*6T 5.6UH 0.12*30MM 17.5T	
		L706	150-985R	COIL, CHOKE, DR10*12 50UH 0.12*15MM 35.5T SWITCHING	

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		L707	150-985P	COIL, CHOKE, DR12*15 6MH 0.25MM 365.5T H-CENTERING	
		L708	150-985N	COIL, CHOKE, DR10*10 4.7UH 0.16MM 322.5T FILTER CHOKE	
		L711	150-985Q	COIL, CHOKE, DR8*11 3.3MH 0.15MM 319.5T	
		L771	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L772	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
/		L901	6140TBZ011A	COIL, CHOKE EER4045 2000000H 0.1MM 190.5T PFC CHOKE	
		L902	6140TBZ009B	COIL, CHOKE, NO CORE 3.5UH 0.12*30MM 28.5T FILTER	
		L904	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L911	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L912	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L913	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L914	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L915	150-985F	COIL, CHOKE, DR10*10 10UH 0.5MM 14.5T	
		L916	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L921	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
TRANSISTORs					
		Q401	0TR126609AA	TRANSISTOR, KTA1266-Y(KTA1015) TP KEC TO92 PNP	
		Q402	0TR114009AB	TRANSISTOR, DTC114ES TP ROHM-K SPT NPN	
		Q404	0TF306000AA	FET, 2SJ306 BK SANYO -250V -3A TO220ML	
		Q411	0TR126609AA	TRANSISTOR, KTA1266-Y(KTA1015) TP KEC TO92 PNP	
		Q412	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q413	0TR320209AA	TRANSISTOR, KTC3202-TP-Y (KTC1959)KEC	
		Q414	0TR127009AA	TRANSISTOR, KTA1270-Y(KTA562TM) TP KEC TO92 PNP	
/		Q503	0TF306000AA	FET, 2SJ306 BK SANYO -250V -3A TO220ML	
		Q504	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q505	0TR320209AA	TRANSISTOR, KTC3202-TP-Y (KTC1959)KEC	
		Q506	0TR127009AA	TRANSISTOR, KTA1270-Y(KTA562TM) TP KEC TO92 PNP	
/		Q507	0TF284700AA	FET, 2SK2847 BK TOSHIBA 900V 8A TO-3P(IS)	
		Q514	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q515	0TR463300AB	TRANSISTOR, 2SC4633(LS-CB11) BK SANYO LS-CB11 NPN	
		Q516	0TR463300AB	TRANSISTOR, 2SC4633(LS-CB11) BK SANYO LS-CB11 NPN	
		Q531	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q601	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q602	0TR320509AB	TRANSISTOR, KTC3205-Y(KTC2236A) TP KEC TO92L NPN	
		Q603	0TR127309AA	TRANSISTOR, KTA1273-Y(KTA966A) TP KEC TO92L PNP	
		Q701	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q702	0TR320209AA	TRANSISTOR, KTC3202-TP-Y (KTC1959)KEC	
		Q703	0TR127009AA	TRANSISTOR, KTA1270-Y(KTA562TM) TP KEC TO92 PNP	
		Q704	0TR880000CA	TRANSISTOR, 2SD880-O BK TOSHIBA TO220AB NPN	
		Q705	0TF283509AA	FET, 2SK2835(TP) TP TOSHIBA 200V 5A NON	
		Q707	0TR504700AA	TRANSISTOR, 2SC5047 BK SANYO TO3PBL H-OUT TR	
		Q710	0TR320509AB	TRANSISTOR, KTC3205-Y(KTC2236A) TP KEC TO92L NPN	
		Q711	0TR320209AA	TRANSISTOR, KTC3202-TP-Y (KTC1959)KEC	
		Q712	0TF650000AA	FET, IRF650A BK SAMSUNG 200V 25A TO220	
		Q713	0TF640000CA	FET, IRFS640A BK SAMSUNG 200V 9A TO220F	
		Q714	0TF650000AA	FET, IRF650A BK SAMSUNG 200V 25A TO220	
		Q715	0TF640000CA	FET, IRFS640A BK SAMSUNG 200V 9A TO220F	
		Q716	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		Q717	0TF283509AA	FET, 2SK2835(TP) TP TOSHIBA 200V 5A NON	
		Q721	0TR126609AA	TRANSISTOR, KTA1266-Y(KTA1015) TP KEC TO92 PNP	
		Q762	0TR114009AB	TRANSISTOR, DTC114ES TP ROHM-K SPT NPN	
		Q901	0TF284300AA	FET, 2SK2843 BK TOSHIBA 600V 10A TO220NIS	
		Q902	0TF284700AA	FET, 2SK2847 BK TOSHIBA 900V 8A TO-3P(IS)	
		Q903	0TR127509AC	TRANSISTOR, KTA1275-Y(KTA1013) TP KEC TO92L PNP	
		Q904	0TR126609AA	TRANSISTOR, KTA1266-Y(KTA1015) TP KEC TO92 PNP	
		Q906	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q907	0TR390600CA	TRANSISTOR, 2N3906 TP SAMSUNG TO92 NPN	
		Q914	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q915	0TR320209AA	TRANSISTOR, KTC3202-TP-Y (KTC1959)KEC	
RESISTORS					
		R401	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R402	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R403	0RD3302Q609	RESISTOR, FIXED CARBON FILM, 33K 1/4W(3.5% TA52	
		R404	0RD2001Q609	RESISTOR, FIXED CARBON FILM, 2K 1/4W(3.5% TA52	
		R411	0RN1502F409	RESISTOR, FIXED METAL FILM, 15K 1/6W 1% TA52	
		R412	0RD6802Q509	RESISTOR, FIXED CARBON FILM, 68K OHM 1/4 W (3.4) 2%	
		R413	0RD3900Q609	RESISTOR, FIXED CARBON FILM, 390 1/4W(3.5% TA52	
		R417	0RD1302Q509	RESISTOR, FIXED CARBON FILM, 13K OHM 1/4 W (3.4) 2%	
		R418	0RD2002Q609	RESISTOR, FIXED CARBON FILM, 20K 1/4W(3.5% TA52	
		R419	0RN4701F409	RESISTOR, FIXED METAL FILM, 4.70K 1/6W 1% TA52	
		R420	0RN1502F409	RESISTOR, FIXED METAL FILM, 15K 1/6W 1% TA52	
		R421	0RD1003Q609	RESISTOR, FIXED CARBON FILM, 100K 1/4W(3.5% TA52	
		R422	0RD1003Q609	RESISTOR, FIXED CARBON FILM, 100K 1/4W(3.5% TA52	
		R423	0RD8202Q609	RESISTOR, FIXED CARBON FILM, 82K 1/4W(3.5% TA52	
		R426	0RD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
		R428	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R431	0RN5101F409	RESISTOR, FIXED METAL FILM, 5.10K 1/6W 1% TA52	
		R432	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R433	0RD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3.5% TA52	
		R434	0RD3901Q609	RESISTOR, FIXED CARBON FILM, 3.90K 1/4W(3.5% TA52	
		R435	0RD4703Q609	RESISTOR, FIXED CARBON FILM, 470K 1/4W(3.5% TA52	
		R436	0RD4701Q509	RESISTOR, FIXED CARBON FILM, 4.7K OHM 1/4 W (3.4) 2%	
		R437	0RD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R438	0RD0102Q609	RESISTOR, FIXED CARBON FILM, 10 1/4W(3.5% TA52	
		R439	0RD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3.5% TA52	
		R501	0RD1002Q509	RESISTOR, FIXED CARBON FILM, 10K OHM 1/4 W (3.4) 2%	
		R502	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R503	0RN3601F409	RESISTOR, FIXED METAL FILM, 3.6K 1/6W 1% TA52	
		R504	0RN1502F409	RESISTOR, FIXED METAL FILM, 15K 1/6W 1% TA52	
		R505	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R506	0RD1002Q509	RESISTOR, FIXED CARBON FILM, 10K OHM 1/4 W (3.4) 2%	
		R507	0RN1502F409	RESISTOR, FIXED METAL FILM, 15K 1/6W 1% TA52	
		R508	0RD1002Q509	RESISTOR, FIXED CARBON FILM, 10K OHM 1/4 W (3.4) 2%	
		R509	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R511	0RN1302F409	RESISTOR, FIXED METAL FILM, 13K 1/6W 1% TA52	
		R512	0RD2403Q609	RESISTOR, FIXED CARBON FILM, 240K 1/4W(3.5% TA52	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R513	0RD3302Q609	RESISTOR, FIXED CARBON FILM, 33K 1/4W(3.5% TA52	
		R515	0RD1502A609	RESISTOR, FIXED CARBON FILM, 15K OHM 1/2 W (7.0) 5%	
		R516	0RD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3.5% TA52	
		R517	0RD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
A		R519	0RN4700F409	RESISTOR, FIXED METAL FILM, 470 1/6W 1 TA52	
		R521	0RD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R522	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R523	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R524	0RD3301Q509	RESISTOR, FIXED CARBON FILM, 3.3K OHM 1/4 W (3.4) 2%	
		R525	0RD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3.5% TA52	
		R526	0RD4701Q509	RESISTOR, FIXED CARBON FILM, 4.7K OHM 1/4 W (3.4) 2%	
		R527	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R531	0RX0102J609	RESISTOR, SMALL FIX METAL FILM OXIDE, 10 OHM 1 W 5%	
		R534	0RX0622K607	RESISTOR, SMALL FIX METAL FILM OXIDE, 62 OHM 2 W 5%	
A		R541	0RN1303G409	RESISTOR, FIXED METAL FILM, 130K 1/4W 1 TA52	
		R542	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R543	0RD0122Q609	RESISTOR, FIXED CARBON FILM, 12 1/4W(3.5% TA52	
		R546	0RD6201Q609	RESISTOR, FIXED CARBON FILM, 6.20K 1/4W(3.5% TA52	
		R547	0RD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R551	0RD2703A609	RESISTOR, FIXED CARBON FILM, 270K OHM 1/2 W (7.0) 5%	
		R552	0RD2703A609	RESISTOR, FIXED CARBON FILM, 270K OHM 1/2 W (7.0) 5%	
		R553	0RX1503L666	RESISTOR, SMALL FIX METAL FILM OXIDE, 150KOHM 3 W 5%	
		R554	0RX1503L666	RESISTOR, SMALL FIX METAL FILM OXIDE, 150KOHM 3 W 5%	
		R555	0RX1001H609	RESISTOR, SMALL FIX METAL FILM OXIDE, 1000 1/2 W 5%	
		R601	0RN1202F409	RESISTOR, FIXED METAL FILM, 12K 1/6W 1% TA52	
		R602	0RN6201F409	RESISTOR, FIXED METAL FILM, 6.20K 1/6W 1% TA52	
		R603	0RN3901F409	RESISTOR, FIXED METAL FILM, 3.90K 1/6W 1% TA52	
		R605	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R606	0RN8201F409	RESISTOR, FIXED METAL FILM, 8.20K 1/6W 1% TA52	
		R607	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R611	0RD0331A609	RESISTOR, FIXED CARBON FILM, 3.3 OHM 1/2 W (7.0) 5%	
		R612	0RD4700A609	RESISTOR, FIXED CARBON FILM, 470 OHM 1/2 W (7.0) 5%	
		R613	0RD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R614	0RN0101H409	RESISTOR, FIXED METAL FILM, 1.0 1/2W 1 TA52	
		R615	0RN8201F409	RESISTOR, FIXED METAL FILM, 8.20K 1/6W 1% TA52	
		R616	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R617	0RN1001F409	RESISTOR, FIXED METAL FILM, 1K 1/6W 1% TA52	
		R631	0RD0272Q609	RESISTOR, FIXED CARBON FILM, 27 OHM 1/4 W (3.4) 5%	
		R632	0RD1002Q509	RESISTOR, FIXED CARBON FILM, 10K OHM 1/4 W (3.4) 2%	
		R633	0RD8201Q609	RESISTOR, FIXED CARBON FILM, 8.20K 1/4W(3.5% TA52	
		R634	0RD7502Q609	RESISTOR, FIXED CARBON FILM, 75K 1/4W(3.5% TA52	
		R635	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R636	0RD0102Q609	RESISTOR, FIXED CARBON FILM, 10 1/4W(3.5% TA52	
		R637	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R701	0RD3300A609	RESISTOR, FIXED CARBON FILM, 330 OHM 1/2 W (7.0) 5%	
		R702	0RD5101Q609	RESISTOR, FIXED CARBON FILM, 5.10K 1/4W(3.5% TA52	
		R704	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R706	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R707	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R709	0RD3901Q609	RESISTOR, FIXED CARBON FILM, 3.90K 1/4W(3.5% TA52	

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R710	ORD3300Q609	RESISTOR, FIXED CARBON FILM, 330 1/4W(3.5% TA52	
		R712	ORD3901Q609	RESISTOR, FIXED CARBON FILM, 3.90K 1/4W(3.5% TA52	
		R713	ORD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R714	ORD1201Q609	RESISTOR, FIXED CARBON FILM, 1.20K 1/4W(3.5% TA52	
		R715	ORD1003Q609	RESISTOR, FIXED CARBON FILM, 100K 1/4W(3.5% TA52	
		R716	ORX1000L607	RESISTOR, SMALL FIX METAL FILM OXIDE, 100 3 W 5% TA62	
		R717	ORN0471H609	RESISTOR, FIXED METAL FILM, 4.7 OHM 1/2 W 5% TA52	
		R718	ORX0562J609	RESISTOR, SMALL FIX METAL FILM OXIDE, 56 OHM 1 W 5%	
		R719	ORD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R720	ORD1502Q609	RESISTOR, FIXED CARBON FILM, 15K 1/4W(3.5% TA52	
		R721	ORN2201F409	RESISTOR, FIXED METAL FILM, 2.20K 1/6W 1% TA52	
		R722	ORD3301Q509	RESISTOR, FIXED CARBON FILM, 3.3K OHM 1/4 W (3.4) 2%	
		R723	ORD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3.5% TA52	
		R724	ORD1200Q609	RESISTOR, FIXED CARBON FILM, 120 1/4W(3.5% TA52	
		R725	ORD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R726	ORD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3.5% TA52	
		R727	ORD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R731	ORD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R732	ORX2200K607	RESISTOR, SMALL FIX METAL FILM OXIDE, 220 OHM 2 W 5%	
		R733	ORD0471A609	RESISTOR, FIXED CARBON FILM, 4.7 OHM 1/2 W (7.0) 5% TA52	
		R735	ORD1303Q609	RESISTOR, FIXED CARBON FILM, 130K 1/4W(3.5% TA52	
		R737	ORD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R738	ORD2701Q609	RESISTOR, FIXED CARBON FILM, 2.70K 1/4W(3.5% TA52	
		R739	ORD4702Q609	RESISTOR, FIXED CARBON FILM, 47K 1/4W(3.5% TA52	
		R741	ORD6802Q509	RESISTOR, FIXED CARBON FILM, 68K OHM 1/4 W (3.4) 2%	
		R742	ORD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R743	ORD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
		R744	ORD2402Q509	RESISTOR, FIXED CARBON FILM, 24K OHM 1/4 W (3.4) 2%	
		R745	ORD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R746	ORD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R747	ORD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3.5% TA52	
		R748	ORD3000Q609	RESISTOR, FIXED CARBON FILM, 300 1/4W(3.5% TA52	
		R751	ORX0511J609	RESISTOR, SMALL FIX METAL FILM OXIDE, 5.10 OHM 1 W 5%	
		R752	ORX0301K607	RESISTOR, SMALL FIX METAL FILM OXIDE, 3.0 OHM 2 W 5%	
		R753	ORX0301K607	RESISTOR, SMALL FIX METAL FILM OXIDE, 3.0 OHM 2 W 5%	
		R756	ORD0272A609	RESISTOR, FIXED CARBON FILM, 27 OHM 1/2 W (7.0) 5% TA52	
		R762	ORX1800K607	RESISTOR, SMALL FIX METAL FILM OXIDE, 180 OHM 2 W 5%	
		R763	ORD1200Q609	RESISTOR, FIXED CARBON FILM, 120 1/4W(3.5% TA52	
		R764	ORD1002Q509	RESISTOR, FIXED CARBON FILM, 10K OHM 1/4 W (3.4) 2%	
		R765	ORD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R767	ORD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
		R770	ORD1803A609	RESISTOR, FIXED CARBON FILM, 180K OHM 1/2 W (7.0) 5%	
		R771	ORD1004Q609	RESISTOR, FIXED CARBON FILM, 1M OHM 1/4 W (3.4) 5% TA52	
		R772	ORD1004Q609	RESISTOR, FIXED CARBON FILM, 1M OHM 1/4 W (3.4) 5% TA52	
		R773	ORD1004Q609	RESISTOR, FIXED CARBON FILM, 1M OHM 1/4 W (3.4) 5% TA52	
		R774	ORD1004Q609	RESISTOR, FIXED CARBON FILM, 1M OHM 1/4 W (3.4) 5% TA52	
		R775	ORX1000L607	RESISTOR, SMALL FIX METAL FILM OXIDE, 100 3 W 5% TA62	
		R776	ORD2202Q609	RESISTOR, FIXED CARBON FILM, 22K 1/4W(3.5% TA52	

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*S	AL	LOC. NO.	PART NO.	DESCRIPTION/ SPECIFICATION	REMARK
		R777	0RD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R778	0RX0102L665	RESISTOR, SMALL FIX METAL FILM OXIDE, 100OHM 3 W 5% SF	
		R779	0RD1004Q609	RESISTOR, FIXED CARBON FILM, 1M OHM 1/4 W (3.4) 5% TA52	
		R781	0RD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
		R782	0RD4702Q609	RESISTOR, FIXED CARBON FILM, 47K 1/4W(3.5% TA52	
		R783	0RD5600Q609	RESISTOR, FIXED CARBON FILM, 560 1/4W(3.5% TA52	
		R784	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R788	0RD0822Q609	RESISTOR, FIXED CARBON FILM, 82 1/4W(3.5% TA52	
		R901	0RD3003A609	RESISTOR, FIXED CARBON FILM, 300K OHM 1/2 W (7.0) 5%	
		R902	0RD3903Q609	RESISTOR, FIXED CARBON FILM, 390K 1/4W(3.5% TA52	
		R903	0RD3603Q609	RESISTOR, FIXED CARBON FILM, 360K OHM 1/4 W (3.4) 5%	
		R904	0RMZTSV001E	RESISTOR, CEMENT, 12 OHM 5 W 5% B RSR	
		R906	0RD3003Q509	RESISTOR, FIXED CARBON FILM, 300K OHM 1/4 W (3.4) 2%	
		R907	0RD3003Q509	RESISTOR, FIXED CARBON FILM, 300K OHM 1/4 W (3.4) 2%	
		R908	180-465H	RESISTOR, CEMENT, 0.24 OHM 5W 5% B RWR	
		R911	0RN3901F409	RESISTOR, FIXED METAL FILM, 3.90K 1/6W 1% TA52	
		R912	0RB0270K607	RESISTOR, FIX WIRE-WOUND PRECISION, 0.27 OHM 2	
		R913	0RN2202F409	RESISTOR, FIXED METAL FILM, 22K 1/6W 1% TA52	
		R914	0RD0202Q609	RESISTOR, FIXED CARBON FILM, 20 1/4W(3.5% TA52	
		R915	0RD2001Q609	RESISTOR, FIXED CARBON FILM, 2K 1/4W(3.5% TA52	
		R916	0RN4701F409	RESISTOR, FIXED METAL FILM, 4.70K 1/6W 1% TA52	
		R917	180-465Q	RESISTOR, CEMENT, 51K OHM 5W 5% B RSR	
		R921	0RD0102Q609	RESISTOR, FIXED CARBON FILM, 10 1/4W(3.5% TA52	
		R923	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3.5% TA52	
		R924	0RD1002Q609	RESISTOR, FIXED CARBON FILM, 10K 1/4W(3.5% TA52	
		R925	0RD4702Q609	RESISTOR, FIXED CARBON FILM, 47K 1/4W(3.5% TA52	
		R926	0RD4702Q609	RESISTOR, FIXED CARBON FILM, 47K 1/4W(3.5% TA52	
		R927	0RD4701Q509	RESISTOR, FIXED CARBON FILM, 4.7K OHM 1/4 W (3.4) 2%	
		R928	0RD1202Q509	RESISTOR, FIXED CARBON FILM, 12K OHM 1/4 W (3.4) 2%	
		R929	0RD1802Q609	RESISTOR, FIXED CARBON FILM, 18K 1/4W(3.5% TA52	
		R931	0RD1004A609	RESISTOR, FIXED CARBON FILM, 1.0M OHM 1/2 W (7.0) 5%	
		R932	0RN3003F409	RESISTOR, FIXED METAL FILM, 300K 1/6W 1% TA52	
		R934	0RD0122Q609	RESISTOR, FIXED CARBON FILM, 12 1/4W(3.5% TA52	
		R935	0RD0101A609	RESISTOR, FIXED CARBON FILM, 1 OHM 1/2 W (7.0) 5% TA52	
		R936	0RD0332Q609	RESISTOR, FIXED CARBON FILM, 33 1/4W(3.5% TA52	
		R937	0RD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3.5% TA52	
		R938	0RB0270K607	RESISTOR, FIX WIRE-WOUND PRECISION, 0.27 OHM 2	
		R939	0RD1200Q609	RESISTOR, FIXED CARBON FILM, 120 1/4W(3.5% TA52	
		R941	0RD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3.5% TA52	
		R947	0RD0122Q609	RESISTOR, FIXED CARBON FILM, 12 1/4W(3.5% TA52	
		R948	0RD8201Q609	RESISTOR, FIXED CARBON FILM, 8.20K 1/4W(3.5% TA52	
		R950	0RN0270H609	RESISTOR, FIXED METAL FILM, 0.27 1/2W 5 TA52	
		R951	0RD3900Q609	RESISTOR, FIXED CARBON FILM, 390 1/4W(3.5% TA52	
		R952	0RD1501Q509	RESISTOR, FIXED CARBON FILM, 1.5K OHM 1/4 W (3.4) 2%	
		R953	0RD2003Q609	RESISTOR, FIXED CARBON FILM, 200K 1/4W(3.5% TA52	
▲		R954	0RD1801Q509	RESISTOR, FIXED CARBON FILM 1.8K OHM 1/4 W (3.4) 2%	
		R955	0RN1503H409	RESISTOR, FIXED METAL FILM, 150K OHM 1/2 W 1% TA52	
		R957	0RD6801Q609	RESISTOR, FIXED CARBON FILM, 6.80K 1/4W(3.5% TA52	
		R961	0RD0152Q609	RESISTOR, FIXED CARBON FILM, 15 1/4W(3.5% TA52	

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*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R962	0RD1501Q509	RESISTOR, FIXED CARBON FILM, 1.5K OHM 1/4 W (3.4) 2%	
		R963	0RN3601F409	RESISTOR, FIXED METAL FILM, 3.6K 1/6W 1 TA52	
		R964	0RN3601F409	RESISTOR, FIXED METAL FILM, 3.6K 1/6W 1 TA52	
		R965	0RD2200Q609	RESISTOR, FIXED CARBON FILM, 220 1/4W(3 5% TA52	
		R966	0RN0270H609	RESISTOR, FIXED METAL FILM, 0.27 1/2W 5 TA52	
		R967	0RD3301Q609	RESISTOR, FIXED CARBON FILM, 3.30K 1/4W(3 5% TA52	
		R973	0RD1501Q509	RESISTOR, FIXED CARBON FILM, 1.5K OHM 1/4 W (3.4) 2%	
		R974	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3 5% TA52	
		R975	0RN1502F409	RESISTOR, FIXED METAL FILM, 15K 1/6W 1% TA52	
		R976	0RD2401Q609	RESISTOR, FIXED CARBON FILM, 2.40K 1/4W(3 5% TA52	
		R981	0RD6201Q609	RESISTOR, FIXED CARBON FILM, 6.20K 1/4W(3 5% TA52	
		R982	0RD1202Q509	RESISTOR, FIXED CARBON FILM, 12K OHM 1/4 W (3.4) 2%	
		R984	0RD2201Q609	RESISTOR, FIXED CARBON FILM, 2.20K 1/4W(3 5% TA52	
		R985	0RD7500Q609	RESISTOR, FIXED CARBON FILM, 750 OHM 1/4 W (3.4) 5%	
		R986	0RD5601Q509	RESISTOR, FIXED CARBON FILM, 5.6K OHM 1/4 W (3.4) 2%	
		VR501	180-035Q	VOLUME, EVN-DJAA03B24 (MEC),20KB	
▲		VR901	180-035D	VOLUME, EVN-DJAA03B32 (MEC),300B	
OTHERs					
▲		F901	131-040E	FUSE, TIME LAG, 5A 250V HBC UL/CSA TRIAD	
		F951	131-041A	FUSE, TIME LAG, 5A 125V MICRO MICRO	
		J68	0RD1001Q609	RESISTOR, FIXED CARBON FILM, 1K 1/4W(3 5% TA52	
		LF901	150-A50D	FILTER(CIRC), LINE, SQ2930 9MH MIN 0.70MM 64T	
		PG01	302-987A	SHIELD, TERMINAL EARTH	
		PG02	302-987A	SHIELD, TERMINAL EARTH	
		PG03	302-987A	SHIELD, TERMINAL EARTH	
		PG04	302-987A	SHIELD, TERMINAL EARTH	
		PG05	302-987A	SHIELD, TERMINAL EARTH	
		PG06	302-987A	SHIELD, TERMINAL EARTH	
		RL701	141-014B	RELAY, UT205-12SC YUYU 250VAC 5A 12V 30MA 400 OHM 1C	
▲		RL902	141-040A	RELAY, JW2HN-DC5V MATSUSHITA 250VAC 5A 5V 106MA 47Ω	
		SC701	140-079C	SWITCH, LEVER, SLS-1301 SW NON 30 0 HORIZONTAL 100	
		SG502	165-004A	SPARK GAP, AG20PT 152F-L3N/S-23 HANDOK RADIAL BULK	
		SG503	6918TAT002A	SPARK GAP, AXIAL, DSP-102M-A21F MMC AXIAL TAPPING	
		T701	151-515A	TRANSFORMER, HORIZONTAL DRIVER, EI 2519 4.5MH CF201	
		T702	6140TDZ004A	COIL, DUMMY, EER2834 2.0MH	
▲		T703	6174Z-1018A	FBT (FLY BACK TRANSFORMER), "FMMTC61 MNT19", 95KHZ	
▲		T901	6170TMZ070A	TRANSFORMER, SMPS, EER424215 470UH 18-PIN CG991B	
▲ or		T901	6170TMZ060A	TRANSFORMER, SMPS, EER4045 460UH 18-PIN	
▲		T902	6170TMZ025A	TRANSFORMER, SMPS, CB790 SUB TRANS EER2834 12-PIN	
▲		T903	151-414E	TRANSFORMER, PULSE, UU1116 8.8MH PLUSE	
▲		TH901	6322TB070AA	THERMISTOR, PTC, J503P63D070M290S JA HWA +/- 20% 220V	
		X701	6212TBU001A	RESONATOR, CSB500E55 MURATA 500KHZ BK	
VIDEO BOARD					
CAPACITORS					
		C302	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C303	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C304	0CH6330K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 33PF 50V J NPO	
		C305	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	

*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C306	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C307	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C309	0CH6121K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 120PF 50V J NP0	
		C310	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C311	0CH6470K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 47PF 50V J NP0	
		C312	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C313	0CH6102K406	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 1000PF 50V J SL	
		C317	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C318	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C321	0CH6100K116	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 10PF 50V D NP0	
		C322	0CH6100K116	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 10PF 50V D NP0	
		C323	0CH6100K116	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 10PF 50V D NP0	
		C326	0CE1056K618	CAPACITOR, AL.ELECTROLYTIC, 1.0U SMS 50V M FM5 TP5	
		C330	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C331	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C332	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C333	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C334	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C335	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C336	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C337	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C338	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C339	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C340	0CE4766F618	CAPACITOR, AL.ELECTROLYTIC, 47U SMS 16V M FM5 TP5	
		C341	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C342	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C346	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C347	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C348	0CE3356K618	CAPACITOR, AL.ELECTROLYTIC, 3.3U SMS 50V M FM5 TP5	
		C349	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C350	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C351	0CH3103K516	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 10000PF 50V K B	
		C352	0CE3356K618	CAPACITOR, AL.ELECTROLYTIC, 3.3U SMS 50V M FM5 TP5	
		C354	0CE1056K618	CAPACITOR, AL.ELECTROLYTIC, 1.0U SMS 50V M FM5 TP5	
		C356	0CE3356K618	CAPACITOR, AL.ELECTROLYTIC, 3.3U SMS 50V M FM5 TP5	
		C357	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C358	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C360	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C361	0CH6150K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 15PF 50V J NP0	
		C362	0CH6150K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 15PF 50V J NP0	
		C363	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C364	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C365	0CH6150K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 15PF 50V J NP0	
		C366	0CE4756Q638	CAPACITOR, AL.ELECTROLYTIC, 4.7000UF SMS 200V M FM5	
		C367	0CH6030K116	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 3PF 50V D NP0	
		C368	181-288E	CAPACITOR, POLYESTER, MKT 100V 474JTR PHS 26474	
		C369	181-288E	CAPACITOR, POLYESTER, MKT 100V 474JTR PHS 26474	
		C370	181-288E	CAPACITOR, POLYESTER, MKT 100V 474JTR PHS 26474	
		C371	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	

MODEL: VCDTS21466-1 VCDTS21466-2				DATE: 1999.2.14	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C372	0CE1066F618	CAPACITOR, AL.ELECTROLYTIC, 10UF SMS 16V M FL TP5	
		C373	0CK5610K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 560P 50V	
		C374	0CK10301510	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 0.01M 1KV	
		C375	0CK2220W515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 2200P 500V K B	
		C377	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C378	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C379	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C382	0CE2256P618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 160V M FM5 TP5	
		C383	0CE2256P618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 160V M FM5 TP5	
		C384	0CE2256P618	CAPACITOR, AL.ELECTROLYTIC, 2.2U SMS 160V M FM5 TP5	
		C385	0CE2266N618	CAPACITOR, AL.ELECTROLYTIC, 22M SMS 100V M FM5 TP5	
		C386	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C387	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C388	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C389	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C390	0CE1056Q638	CAPACITOR, AL.ELECTROLYTIC, 1UF SMS 200V M FM5 TP5	
		C391	0CE1076F618	CAPACITOR, AL.ELECTROLYTIC, 100UF SMS 16V M TP(5)	
		C392	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C393	0CE1066H618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 25V M FM5	
		C394	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C395	0CE1066H618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 25V M FM5	
DIODEs					
		D301	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D302	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D303	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D304	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D305	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D306	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D307	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D308	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D309	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D311	ODS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D312	ODS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D313	ODS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D314	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D315	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D316	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D321	ODZ910009AH	DIODE, ZENER, MTZJ9.1B TP ROHM-K DO34 500MW 9.1V 5MA	
		D361	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D362	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D363	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D364	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D365	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D366	ODD830009AA	DIODE, SWITCHING, 1SS83 TP HITACHI DO35 250V 625MA 1A	
		D367	ODS124409AA	DIODE, SWITCHING, 1SS244 TP ROHM KOREA	
		D368	ODS124409AA	DIODE, SWITCHING, 1SS244 TP ROHM KOREA	
		D369	ODS124409AA	DIODE, SWITCHING, 1SS244 TP ROHM KOREA	
		D390	ODS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999. 2. 11.	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
ICs					
		IC301	0IMO455720A	IC, MOTOROLA, LSC4557P2 16,SDIP BK OSD IC	
		IC302	0IMI527430B	IC, MITSUBISHI, M52743BSP 36P,SDIP BK 3CH VIDEO PREAMP	
		IC303	0ISA130000B	IC, SANYO, VPS13 SIP15 BK VIDEO OUTPUT	
		IC304	0IMA576900A	IC, MATSUSHITA, AN5769 SIL12P BK H/V CONV. CORRECTION	
		IC305	0IKE790500E	IC, KEC, KIA79L05BP TO-92L TP -5V REGULATOR	
		IC306	0IKE780800B	IC, KEC, KIA78L08BP(TA) TO-92 8V,150MA	
COILs & COREs					
		L301	0LA1000K119	INDUCTOR, AXIAL LEAD, 100UH K 2.3*3.4 TP	
		L302	0LA1000K119	INDUCTOR, AXIAL LEAD, 100UH K 2.3*3.4 TP	
		L303	125-155L	CORE (CIRC), BEAD, BFS3580A0FG SAMWHA 3.5*8.0MM	
		L330	125-022J	CORE (CIRC), BEAD, FERRITE KQ-1 JS 3.5*5.0MM AXIAL62MM	
		L331	0LR1000K5N5	INDUCTOR, RADIAL LEAD, EL0305RA TDK-K 100UH 10% M 3X5	
		L361	0LA0270K119	INDUCTOR, AXIAL LEAD, 0.27UH K 2.3*3.4 TP	
		L362	0LA0270K119	INDUCTOR, AXIAL LEAD, 0.27UH K 2.3*3.4 TP	
		L363	0LA0270K119	INDUCTOR, AXIAL LEAD, 0.27UH K 2.3*3.4 TP	
		L364	0LA1000K119	INDUCTOR, AXIAL LEAD, 100UH K 2.3*3.4 TP	
		L365	125-155A	CORE (CIRC), BEAD, BFD3510R2FG SAMWHA 3.5*10MM	
TRANSISTORS					
		Q301	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q302	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q303	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q304	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q305	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q309	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
		Q330	0TR390609FA	TRANSISTOR, KST3906-MTF TP SAMSUNG SOT23 GEN.	
		Q331	0TR390609FA	TRANSISTOR, KST3906-MTF TP SAMSUNG SOT23 GEN.	
		Q332	0TR390609FA	TRANSISTOR, KST3906-MTF TP SAMSUNG SOT23 GEN.	
		Q361	0TR137009AA	TRANSISTOR, 2SA1370D/E TP SANYO MP PNP	
		Q362	0TR320609AB	TRANSISTOR, KTC3206-Y,TP(KTC2229),KEC	
		Q363	0TR137009AA	TRANSISTOR, 2SA1370D/E TP SANYO MP PNP	
		Q364	0TR320609AB	TRANSISTOR, KTC3206-Y,TP(KTC2229),KEC	
		Q365	0TR137009AA	TRANSISTOR, 2SA1370D/E TP SANYO MP PNP	
		Q366	0TR320609AB	TRANSISTOR, KTC3206-Y,TP(KTC2229),KEC	
		Q390	0TR320709AA	TRANSISTOR, KTC3207,TP(KTC2482),KEC	
RESISTORs					
		R301	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R302	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R303	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R304	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R305	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R306	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R307	0RH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R308	0RH5601D622	RESISTOR, CHIP, 5.6K 1/10W 5 D.R/TP	
		R309	0RH2001D622	RESISTOR, CHIP, 2.0K 1/10W 5 D.R/TP	
		R310	0RH2001D622	RESISTOR, CHIP, 2.0K 1/10W 5 D.R/TP	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999-2-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R311	ORH2002D622	RESISTOR, CHIP, 20K 1/10W 5 D.R/TP	
		R312	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R313	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R314	ORH2203D622	RESISTOR, CHIP, 220K 1/10W 5 D.R/TP	
		R315	ORH3301D622	RESISTOR, CHIP, 3.3K 1/10W 5 D.R/TP	
		R316	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R317	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R318	ORH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R319	ORH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R320	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R321	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R327	ORD2200Q609	RESISTOR, FIXED CARBON FILM, 220 1/4W(3.5% TA52	
		R328	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R329	ORH1102D422	RESISTOR, CHIP, 11K 1/10W 1% D.R/TP	
		R330	ORH2201D422	RESISTOR, CHIP, 2.20K 1/10W 1% D.R/TP	
		R331	ORH0752D622	RESISTOR, CHIP, 75 1/10W 5 D.R/TP	
		R332	ORH0752D622	RESISTOR, CHIP, 75 1/10W 5 D.R/TP	
		R333	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R335	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R336	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R337	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R338	ORH2001D622	RESISTOR, CHIP, 2.0K 1/10W 5 D.R/TP	
		R339	ORH0472D622	RESISTOR, CHIP, 47 1/10W 5 D.R/TP	
		R340	ORD4700Q609	RESISTOR, FIXED CARBON FILM, 470 OHM 1/4 W (3.4) 5%	
		R341	ORH2001D622	RESISTOR, CHIP, 2.0K 1/10W 5 D.R/TP	
		R342	ORH0472D622	RESISTOR, CHIP, 47 1/10W 5 D.R/TP	
		R343	ORD4700Q609	RESISTOR, FIXED CARBON FILM, 470 OHM 1/4 W (3.4) 5%	
		R344	ORH2001D622	RESISTOR, CHIP, 2.0K 1/10W 5 D.R/TP	
		R345	ORH0472D622	RESISTOR, CHIP, 47 1/10W 5 D.R/TP	
		R346	ORD4700Q609	RESISTOR, FIXED CARBON FILM, 470 OHM 1/4 W (3.4) 5%	
		R347	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R348	ORH2700D622	RESISTOR, CHIP, 270 1/10W 5 D.R/TP	
		R349	ORH1801D622	RESISTOR, CHIP, 1.8K 1/10W 5 D.R/TP	
		R354	ORH0152D622	RESISTOR, CHIP, 15 1/10W 5 D.R/TP	
		R355	ORH0152D622	RESISTOR, CHIP, 15 1/10W 5 D.R/TP	
		R356	ORH0152D622	RESISTOR, CHIP, 15 1/10W 5 D.R/TP	
		R357	ORD5602Q609	RESISTOR, FIXED CARBON FILM, 56K 1/4W(3.5% TA52	
		R358	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R359	ORD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R360	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R361	ORH0682D622	RESISTOR, CHIP, 68 1/10W 5 D.R/TP	
		R362	ORH0682D622	RESISTOR, CHIP, 68 1/10W 5 D.R/TP	
		R363	ORD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R364	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R365	ORD0472Q609	RESISTOR, FIXED CARBON FILM, 47 1/4W(3.5% TA52	
		R366	ORH0682D622	RESISTOR, CHIP, 68 1/10W 5 D.R/TP	
		R367	ORH3300D622	RESISTOR, CHIP, 330 1/10W 5 D.R/TP	
		R368	ORD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3.5% TA52	

MODEL: VCDTS21466-1 VCDTS21466-2				DATE: 1999-2-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R369	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R370	0RH3300D622	RESISTOR, CHIP, 330 1/10W 5 D.R/TP	
		R371	0RD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3 5% TA52	
		R372	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R373	0RH6800D622	RESISTOR, CHIP, 680 OHM 1 / 10 W 5% D R/TP	
		R374	0RD0222Q609	RESISTOR, FIXED CARBON FILM, 22 1/4W(3 5% TA52	
		R375	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R376	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3 5% TA52	
		R377	0RH4702D622	RESISTOR, CHIP, 47K 1/10W 5 D.R/TP	
		R378	0RH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R379	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R380	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R381	0RH4702D622	RESISTOR, CHIP, 47K 1/10W 5 D.R/TP	
		R382	0RH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R383	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R384	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R385	0RH4702D622	RESISTOR, CHIP, 47K 1/10W 5 D.R/TP	
		R386	0RH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R387	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R388	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R389	0RD0101Q609	RESISTOR, FIXED CARBON FILM, 1 1/4W(3 5% TA52	
		R391	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R392	0RH2003D622	RESISTOR, CHIP, 200K 1/10W 5 TA	
		R393	0RH1004D622	RESISTOR, CHIP, 1.0M 1/10W 5 D.R/TP	
		R396	0RH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R397	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R3101	0RH5601D622	RESISTOR, CHIP, 5.6K 1/10W 5 D.R/TP	
		R3102	0RH5601D622	RESISTOR, CHIP, 5.6K 1/10W 5 D.R/TP	
		R3103	0RH5601D622	RESISTOR, CHIP, 5.6K 1/10W 5 D.R/TP	
		R3104	0RH5601D622	RESISTOR, CHIP, 5.6K 1/10W 5 D.R/TP	
		R3105	0RH0332D622	RESISTOR, CHIP, 33 1/10W 5 D.R/TP	
		R3106	0RH0332D622	RESISTOR, CHIP, 33 1/10W 5 D.R/TP	
		R398	0RH1501D622	RESISTOR, CHIP, 1.5K 1/10W 5 D.R/TP	
OTHERs					
		PG01	302-987A	SHIELD, TERMINAL EARTH	
		PG02	302-987A	SHIELD, TERMINAL EARTH	
		SG301	6918TAT001B	SPARK GAP, AXIAL, DSP-201M-A21F MMC AXIAL TAPPING	
		SG302	6918TAT001B	SPARK GAP, AXIAL, DSP-201M-A21F MMC AXIAL TAPPING	
		SG303	6918TAT001B	SPARK GAP, AXIAL, DSP-201M-A21F MMC AXIAL TAPPING	
		SG304	6918TAT001B	SPARK GAP, AXIAL, DSP-201M-A21F MMC AXIAL TAPPING	
		SG305	165-004A	SPARK GAP, AG20PT 152F-L3N/S-23 HANODK RADIAL BULK	
		SK301	381-094L	SOCKET (CIRC), CPT, 033-0-7700-41 METALLO 10PIN 14/360	
INTERFACE BOARD					
CAPACITORs					
		C202	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C203	0CH6470K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 47PF 50V J NP0	
		C206	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999-2-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		C207	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C208	0CH6221K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 220PF 50V J NP0	
		C209	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C211	0CE1064H638	CAPACITOR, AL.ELECTROLYTIC, 10UF SRA 25V M FM5 TP5	
		C212	0CH6330K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 33PF 50V J NP0	
		C213	0CH6330K416	CAPACITOR, CHIP[CERAMIC LD-LESS TC], 33PF 50V J NP0	
		C214	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C215	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C216	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C218	0CC4700K415	CAPACITOR, CERAMIC (TEMP. COMPENSATE), 47P 50V	
		C220	0CE1074F638	CAPACITOR, AL.ELECTROLYTIC, 100UF SRA,SS 16V M FM5	
		C221	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C241	0CE2264F638	CAPACITOR, AL.ELECTROLYTIC, 22UF SRA,SS 16V M FM5	
		C243	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C244	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C245	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C246	0CK2210K515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 220P 50V K B	
		C251	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C252	0CE1074F638	CAPACITOR, AL.ELECTROLYTIC, 100UF SRA,SS 16V M FM5	
		C253	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C254	0CE2264F638	CAPACITOR, AL.ELECTROLYTIC, 22UF SRA,SS 16V M FM5	
		C255	0CE3354K638	CAPACITOR, AL.ELECTROLYTIC, 3.3U SRA 50V M FM5 TP(5)	
		C256	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C257	0CK1020W515	CAPACITOR, CERAMIC (HIGH DIELECTRIC), 1000P 500V K B	
		C258	0CE4754K638	CAPACITOR, AL.ELECTROLYTIC, 4.7M SRA 50V M FM5 TP(5)	
		C260	0CE3344K638	CAPACITOR, AL.ELECTROLYTIC, 0.33UF SRA,SS 50V M FM5	
		C261	0CH3104K946	CAPACITOR, CHIP[CERAMIC LD-LESS HD], 100000PF 50V Z F	
		C262	0CE1074F638	CAPACITOR, AL.ELECTROLYTIC, 100UF SRA,SS 16V M FM5	
		C272	0CE4754K638	CAPACITOR, AL.ELECTROLYTIC, 4.7M SRA 50V M FM5 TP(5)	
		C275	0CE2264H638	CAPACITOR, AL.ELECTROLYTIC, 22UF SRA 25V M FM5 TP5	
		C276	0CE2264H638	CAPACITOR, AL.ELECTROLYTIC, 22UF SRA 25V M FM5 TP5	
		C278	0CE3354K638	CAPACITOR, AL.ELECTROLYTIC, 3.3U SRA 50V M FM5 TP(5)	
		C279	0CE3354K638	CAPACITOR, AL.ELECTROLYTIC, 3.3U SRA 50V M FM5 TP(5)	
		C280	0CE3354K638	CAPACITOR, AL.ELECTROLYTIC, 3.3U SRA 50V M FM5 TP(5)	
DIODEs					
		D207	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA	
		D208	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA	
		D209	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA	
		D211	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V 5MA	
		D212	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D213	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D214	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D215	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D217	0DR330009CA	DIODE, RECTIFIER, BYD33D TP PHILIPS SOD81 200V 1.3A	
		D218	0DZ120009AF	DIODE, ZENER, MTZJ12B TP ROHM-K DO34 500MW 12V 5MA	
		D220	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D221	0DZ510009EE	DIODE, ZENER, UDV S 5.1B TP ROHM-K SOD323 200MW 5.1V	
		D222	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999-2-1	
*S.	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		D223	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D224	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D225	0DS113309AA	DIODE, SWITCHING, 1SS133 TP ROHM KOREA DO34 90V 0.4A	
		D226	0DZ510009EE	DIODE, ZENER, UDV S 5.1B TP ROHM-K SOD323 200MW 5.1V	
		D227	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
		D231	0DS226009AA	DIODE, SWITCHING, KDS226 TP KEC SOT-23 80V 300MA 2A	
ICs					
		IC202	0IZZTSZ029A	IC [HYBRID ], 42PIN BK OTP(MICOM) ASSY CV991B	
		IC207	0IAL240800A	IC, ATMEL, AT24C08 8D EEPROM(8K,IIC),	
		IC209	0INS353000A	IC, NATIONAL SEMICONDUCTOR, LF353N OP-AMP	
COILs & CORE					
		L201	125-155B	CORE (CIRC), BEAD, BFS3580R2FG SAMWHA 3.5*8.0MM	
TRANSISTORs					
		Q202	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q203	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q204	0TR102009AJ	TRANSISTOR, KRC102S NPN SOT-23 TP KEC	
		Q206	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q207	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q208	0TR127009AA	TRANSISTOR, KTA1270-Y(KTA562TM) TP KEC TO92 PNP	
		Q210	0TR114009AB	TRANSISTOR, DTC114ES TP ROHM-K SPT NPN	
		Q211	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q212	0TR127509AC	TRANSISTOR, KTA1275-Y(KTA1013) TP KEC TO92L PNP	
		Q213	0TR320709AA	TRANSISTOR, KTC3207,TP(KTC2482),KEC	
		Q214	0TR102409AB	TRANSISTOR, KTA1024-Y(KTA949) TP KEC TO92L PNP	
		Q215	0TR102409AB	TRANSISTOR, KTA1024-Y(KTA949) TP KEC TO92L PNP	
		Q216	0TR319809AA	TRANSISTOR, KTC3198-Y(KTC1815) TP KEC TO92 NPN	
		Q217	0TR102409AB	TRANSISTOR, KTA1024-Y(KTA949) TP KEC TO92L PNP	
		Q218	0TR390409CA	TRANSISTOR, 2N3904 TP SAMSUNG TO92 NPN	
RESISTORs					
		R202	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R203	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R204	0RH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R205	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R206	0RH3301D622	RESISTOR, CHIP, 3.3K 1/10W 5 D.R/TP	
		R207	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R208	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R209	0RH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R210	0RH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R211	0RH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R212	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R213	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R214	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R215	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R216	0RH1802D622	RESISTOR, CHIP, 18K 1/10W 5 D.R/TP	
		R217	0RH3302D622	RESISTOR, CHIP, 33K 1/10W 5 D.R/TP	

MODEL: VCDTS21466-1 VCDTS21466-2				DATE: 1999-2-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R218	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R219	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R220	ORH0472D622	RESISTOR, CHIP, 47 1/10W 5 D.R/TP	
		R221	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R222	ORH1602D622	RESISTOR, CHIP, 16K 1/10W 5 TA	
		R223	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R224	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R225	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R226	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R227	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R228	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R229	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R231	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R232	ORH1000D622	RESISTOR, CHIP, 100 1/10W 5 D.R/TP	
		R235	ORH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R236	ORH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R237	ORH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R238	ORH1201D622	RESISTOR, CHIP, 1.2K 1/10W 5 D.R/TP	
		R239	ORH2201D622	RESISTOR, CHIP, 2.2K 1/10W P-TYPE TAPPING	
		R244	ORH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R245	ORH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R246	ORH2200D622	RESISTOR, CHIP, 220 1/10W 5 D.R/TP	
		R247	ORH2200D622	RESISTOR, CHIP, 220 1/10W 5 D.R/TP	
		R251	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R252	ORH1502D622	RESISTOR, CHIP, 15K 1/10W 5 D.R/TP	
		R253	ORH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R254	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R260	ORH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R261	ORH0102D622	RESISTOR, CHIP, 10 1/10W 5 D.R/TP	
		R262	ORH3001D622	RESISTOR, CHIP, 3.0K 1/10W 5 D.R/TP	
		R263	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R264	ORH4701D622	RESISTOR, CHIP, 4.7K 1/10W 5 D.R/TP	
		R265	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R266	ORH1202D622	RESISTOR, CHIP, 12K 1/10W 5 D.R/TP	
		R267	ORH5602D622	RESISTOR, CHIP, 56K 1/10W 5 D.R/TP	
		R268	ORD7501Q509	RESISTOR, FIXED CARBON FILM, 7.5K OHM 1/4 W (3.4) 2%	
		R269	ORH3301D622	RESISTOR, CHIP, 3.3K 1/10W 5 D.R/TP	
		R270	ORH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R271	ORH2202D622	RESISTOR, CHIP, 22K 1/10W 5 D.R/TP	
		R272	ORH3902D622	RESISTOR, CHIP, 39K 1/10W 5 D.R/TP	
		R273	ORH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R274	ORH3303D622	RESISTOR, CHIP, 330K 1/10W 5 D.R/TP	
		R275	ORH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R276	ORH4700D622	RESISTOR, CHIP, 470 1/10W 5 D.R/TP	
		R277	ORH7502D622	RESISTOR, CHIP, 75K 1/10W 5 D.R/TP	
		R278	ORN6801F409	RESISTOR, FIXED METAL FILM, 6.80K 1/6W 1% TA52	
		R279	ORH1302D622	RESISTOR, CHIP, 13K 1/10W 5 TA	
		R280	ORH1001D622	RESISTOR, CHIP, 1.0K 1/10W 5 D.R/TP	
		R282	ORH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	

MODEL: VCDTS21466-1, VCDTS21466-2				DATE: 1999-12-11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		R283	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R285	0RH0102D622	RESISTOR, CHIP, 10 1/10W 5 D.R/TP	
		R287	0RH8203D622	RESISTOR, CHIP, 820K 1/10W 5 D.R/TP	
		R288	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R289	0RN1002F409	RESISTOR, FIXED METAL FILM, 10K 1/6W 1 TA52	
		R290	0RH1002D622	RESISTOR, CHIP, 10K 1/10W 5 D.R/TP	
		R291	0RD4703Q609	RESISTOR, FIXED CARBON FILM, 470K 1/4W(3 5% TA52	
		R292	0RH1804D622	RESISTOR, CHIP, 1.8M 1/10W 5 TA	
		R293	0RH1003D622	RESISTOR, CHIP, 100K 1/10W 5 D.R/TP	
		R294	0RD1000Q609	RESISTOR, FIXED CARBON FILM, 100 1/4W(3 5% TA52	
		R296	0RH3001D622	RESISTOR, CHIP, 3.0K 1/10W 5 D.R/TP	
		R297	0RH1501D622	RESISTOR, CHIP, 1.5K 1/10W 5 D.R/TP	
		R298	0RN3302F409	RESISTOR, FIXED METAL FILM, 33K 1/6W 1% TA52	
		R299	0RN1801F409	RESISTOR, FIXED METAL FILM, 1.80K 1/6W 1% TA52	
OTHERS					
		X201	6202TTB001A	CRYSTAL, HC-49/U SUNNY E 6.000000MHZ 30PPM 16PF BK	
CONTROL BOARD					
		C101	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C102	0CN1040K949	CAPACITOR, TUBULAR(HIGH DIELEC), 0.1M 50V Z F TA52	
		C103	0CE1066K618	CAPACITOR, AL.ELECTROLYTIC, 10M SMS 50V M FM5	
		D101	0DL571300AA	LED, "SPR571MVW3 TP ROHM GREEN/RED ""10,10MCD""	
		D102	0DZ560009CE	DIODE, ZENER, MTZJ5.6B TP ROHM-K DO34 500MW 5.6V	
		L101	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		L102	125-155J	CORE (CIRC), BEAD, BFS2550A0FG SAMWHA 2.5*5.0MM	
		Q101	0TR114009AB	TRANSISTOR, DTC114ES TP ROHM-K SPT NPN	
		Q102	0TR114009AB	TRANSISTOR, DTC114ES TP ROHM-K SPT NPN	
		R101	0RN1300F409	RESISTOR, FIXED METAL FILM, 130 1/6W 1% TA52	
		R102	0RD3900Q509	RESISTOR, FIXED CARBON FILM, 390 OHM 1/4 W (3.4) 2%	
		R103	0RD5600Q509	RESISTOR, FIXED CARBON FILM, 560 OHM 1/4 W (3.4) 2%	
		R104	0RN1301F409	RESISTOR, FIXED METAL FILM, 1.30K 1/6W 1% TA52	
		R105	0RN3901F409	RESISTOR, FIXED METAL FILM, 3.90K 1/6W 1% TA52	
		R106	0RN3300F409	RESISTOR, FIXED METAL FILM, 330 1/6W 1% TA52	
		R107	0RN3300F409	RESISTOR, FIXED METAL FILM, 330 1/6W 1% TA52	
		R108	0RN1001F409	RESISTOR, FIXED METAL FILM, 1K 1/6W 1% TA52	
		SW101	140-058D	SWITCH, TACT, SKHV10911A LGEC NON 12 20 HORIZONTAL	
		SW102	140-058D	SWITCH, TACT, SKHV10911A LGEC NON 12 20 HORIZONTAL	
		SW103	140-058D	SWITCH, TACT, SKHV10911A LGEC NON 12 20 HORIZONTAL	
		SW104	140-058D	SWITCH, TACT, SKHV10911A LGEC NON 12 20 HORIZONTAL	
		SW105	140-058D	SWITCH, TACT, SKHV10911A LGEC NON 12 20 HORIZONTAL	
MISCELLANEOUS					
△	CDT	2423GG2B91D	CDT SET ITC, M46QCG913X-02N6HD		
	CDT EARTH	6868T19001A	CDT EARTH, "19"		
	D/COIL	6140TC4001F	DEGAUSSING COIL, "1290MM 15.3 OHM 0.5MM 135T 19"		
	P/CORD	174-206M	POWER CORD, I-SHENG UL/CSA 1870MM WALL BLACK		
	P/CORD	6410TEW003C	POWER CORD, I-SHENG EUROPE 1870MM WALL IVORY		

MODEL: VCDTS21466-1 VCDTS21466-2				DATE: 1999.2.11	
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION	REMARK
		P/CORD	6410TWP001D	POWER CORD, I-SHENG ASIA 1560MM GRAY	
		P/CORD	6410TUW002B	POWER CORD, I-SHENG USA 1870MM GRAY	
		S/CABLE	387-874J	SIGNAL CABLE, UL 2990-9C DT 1870MM BLACK	
		S/CABLE	387-874E	SIGNAL CABLE, UL 2990-9C DT 1870MM GRAY	

# SCHEMATIC DIAGRAM

## IMPORTANT SAFETY NOTICE

The component identified by shading or international symbol  on the following schematic diagrams in corporate special features important for protection from X-Radiation, fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for those circuit components.

### NOTES :

#### 1. RESISTOR

Unit of resistance is ohm( $\Omega$ ), (K = 1,000, M=1,000,000)

#### 2. COIL

Unit of inductance is  $\mu$ H, unless otherwise noted.

#### 3. VOLTAGE MEASUREMENT

Voltage is measured by a digital meter receiving normal signal.

4. This schematic diagram is the latest at the time of printing and is subject to change without notice.

### SERVICE NOTES :

- Always unplug the unit before beginning any operation such as removing the chassis.

